



# **SOLEBURY SCHOOL**

## **Course Catalog**

**2023 - 2024**

The guidelines and curriculum of Solebury School's academic program

# Course Offerings for 2023-2024

*At the time of publication of this document, the list of course offerings may not be complete. Solebury School reserves the right to make changes in these offerings without notice. Students wishing to pursue courses not listed in this Catalog should consult with the Director of Studies.*

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# Course Catalog

## 2023 - 2024

The courses described in this bulletin comprise Solebury School's academic program. Although each discipline teaches its own skills and its own methods, they have in common the goals of teaching you how to learn, how to solve problems, and how to become as effective a person as you can be. This is encapsulated in our Academic Mission: At Solebury School, we believe that learning is all about the student. Our distinctive and dynamic academic program guides students to discover and pursue their passions and inspires them to set and rise to rigorous expectations.

### ***GRADUATION REQUIREMENTS***

A minimum of 109 credits is required for graduation, distributed in the following manner:

#### **REQUIRED**

24 English (required each trimester)  
18 Mathematics\*  
18 World Language\*\*  
12 Science (Required: either Conceptual Physics & Biology  
—OR— Intro to Physical Science & Intro to Biology)  
12 Social Studies (World History & US History required)  
6 Arts  
1 Health\*\*\*  
Electives to bring total credits to 109

#### **RECOMMENDED**

**24 English**  
**24 Mathematics**  
**18 World Language**  
  
**18 Science**  
**18 Social Studies**  
**6 Arts**  
**1 Health**  
**Electives #**

\* Algebra I, Geometry, and Algebra II & Trigonometry meet the mathematics requirement.

\*\* The graduation requirement in World Language is completion of Level III of a language or two consecutive years of two different languages. In extraordinary circumstances, this requirement may be modified or waived.

\*\*\* Required of all students who enter Solebury before eleventh grade. Only high school Health courses will be considered for transfer credit.

# Students who apply to competitive colleges often have 132 to 156 credits at graduation.

Every student must carry a minimum of 27 credits each year or 9 each trimester. Most full-year and trimester courses earn 2 credits each trimester. Most Health, Computer, and Arts classes earn 1 credit each trimester. Notes about specific classes are shown on the last page of this Catalog.

## ***GRADING and ACADEMICS***

Grading is on a 4-point scale:

$$A+ (97 - 100) = 4.333$$

$$B+ (87 - 89) = 3.333$$

$$C+ (77 - 79) = 2.333$$

$$D+ (67 - 69) = 1.333$$

$$F (59 \text{ or lower}) = 0.000$$

$$A (93 - 96) = 4.000$$

$$B (83 - 86) = 3.000$$

$$C (73 - 76) = 2.000$$

$$D (63 - 66) = 1.000$$

$$A- (90 - 92) = 3.666$$

$$B- (80 - 82) = 2.666$$

$$C- (70 - 72) = 1.666$$

$$D- (60 - 62, \text{ lowest passing grade}) = 0.666$$

Four other grades are possible: P = Pass; NG = No Grade (used for audits); W = Withdrawn; and I = Incomplete. P, NG, and W are not used in grade point average computations. The grade of I is converted to an F if the work is not made up within the deadline specified by the teacher. Grade point average computations are withheld until the Incomplete is converted to a standard (A to F) letter grade.

### **GRADE WEIGHTING**

Students who undertake more challenging programs are rewarded in the computation of their grade point average. Honors and AP courses are weighted at Solebury School. The bonus will not be added to the course grade itself, but will be used in calculating the grade point average. The Honors bonus will be 0.333 and the AP bonus will be 0.666.

Honors and Advanced Placement (AP) courses will move at an accelerated and generally pre-determined pace. Teachers will not have the luxury of slowing the pace or providing inordinate extra help to remediate students who struggle beyond the norm. Seeking additional help in conference or through tutoring is the responsibility of the student. Occasionally, students request to take a course for which they were not recommended. In that event, the student will be contacted by the Director of Studies who will ask the student to share their rationale and to explain how they will address the added challenges. The student may also be asked to complete other, extra work, like providing a writing sample. Once that information is submitted, the current teacher, the receiving teacher, the department head and the Director of Studies will decide collectively whether the student is allowed to enroll in that course.

COURSES with SPECIAL DESIGNATIONS

Honors (H), Advanced Placement (AP), Global Education (G), and Social Justice (SJ)

**English and Social Studies**

World History 9 (G, SJ)  
Honors World History (H, G, SJ)  
Ethics (G, SJ)  
Honors Ethics (H, G, SJ)  
US History (SJ)  
AP US History (AP, SJ)  
Honors US History (H, SJ)  
AP World History (AP, G, SJ)  
AP US Gov't and Politics (AP)  
AP English Lit & Composition (AP)  
AP English Language (AP)  
Honors English 10 (H, G)  
English 10 (G)  
Honors English 9, 11 (H)  
Psych: Theoretical Roots (G, SJ)  
Honors Psychology (H, G)  
Reading & Writing Poetry (H)  
Afr Amer Exp. Recon to WW2 (SJ)  
Exper. Writers of Color (H, G, SJ)  
International Horror Literature (G)  
Civil Rights through Film (SJ)  
Addressing 21Cent Inequalities (SJ)  
Diversity & Culture Share (G, SJ)

**STEM**

AP Calculus AB (AP)  
AP Calculus BC (AP)  
AP Chemistry (AP)  
Honors Anatomy (H)  
Honors Biology (H)  
Honors Chemistry (H)  
AP Comp Sci A (AP)  
AP CS Principles (AP)  
AP Statistics (AP, SJ)  
AP Envi Science (AP, G)  
Statistics (SJ)  
Honors Geometry (H)  
Honors Alg II & Trig (H)  
Honors Pre-Calculus (H)  
Multivariable Calculus (H)

**Arts**

Art History (G)  
Elite Ensemble (H)  
Jazz Roots (H)  
Ear Training & Music Theory (H)  
AP Studio Art (AP, G)  
Honors Ceramics (H)  
Diversity & Culture Share (G, SJ)

**World Languages**

All Language classes (G)  
Spanish Conv. & Culture (G, SJ)  
AP Spanish Language (AP, G)  
French Conv. & Culture (G, SJ)

### ACADEMIC HONORS

A student is awarded Academic Honors for the trimester if s/he earns a grade point average of 3.00 (B) or higher. A student is placed on High Honors if s/he earns a grade point average of 3.66 (A-) or higher. However, no student will be given Honors or High Honors recognition if a grade of D+ or lower is entered for that trimester. Students on Honors and High Honors are eligible for special privileges, including exemption from mandatory study halls.

### ACADEMIC WARNING

A student who is failing a course (F), who has received an Incomplete, or who has two or more grades below C- is placed on the Academic Warning List. The Academic Warning List is prepared six times a year; however, a teacher may issue a warning at any time. Students on Academic Warning automatically lose any privileges they may have earned or are entitled to, may be given special study conditions, and remain on Academic Warning until the next time grades are formally collected. Students who withdraw from a class with an Academic Warning range grade (D+ or lower) are placed on Academic Warning for the remainder of the trimester.

### ACADEMIC HONESTY

It is intellectually dishonest and unfair to submit as one's own the words, ideas, corrections, data, solutions, or opinions of another. Because intellectual honesty is the basis of scholarship, plagiarism and other forms of cheating cannot be tolerated in an academic community. Violators of the principles of Academic Honesty will face serious consequences that may include expulsion. Any student who facilitates an act of academic dishonesty has committed the same offense and thus will be subject to the same penalty as the violator. For a detailed discussion of these issues and consequences, please refer to the Solebury Handbook.

### EARLY GRADUATION

Occasionally a student comes along who is so far advanced in several disciplines that s/he will be ready for college a year early. Such students have completed all requirements, exhausted all the opportunities of our curriculum, and essentially would have nothing to gain by a further year of high school. In those extremely rare cases, students may petition to skip the sophomore year of high school, rather than the junior or senior year, because the college search process (including PSAT's, SAT's, etc.) is distorted by foreshortening, to the student's disadvantage. Such planning, therefore, needs to be done very early.

The Director of Studies will not approve this plan if the student will be only minimally prepared for college. It is always wiser to remain in high school and be maximally prepared for college.

## ***ATTENDANCE POLICIES***

### ***ADD/DROP POLICY***

Each trimester, students may add or drop courses until the fifth day of classes. After that point, it is no longer the student's prerogative to make changes. In rare cases, however, the Director of Studies may grant exceptions after consulting with the teacher and student's adviser. Class sessions missed due to late enrollment still count against the 5-4-3 Attendance Rule so it is wise to learn as much as possible about each course prior to enrolling.

Permission to withdraw from a course may in some cases be granted by the Director of Studies after the drop/add period is over; however, a student may not withdraw solely to avoid a failure. A withdrawal appears permanently on the student's record (W), but does not affect the student's grade point average. A student who withdraws from a class with an Academic Warning range grade (D+ or lower) is placed on Academic Warning for the remainder of the trimester.

### ***PLANNED ABSENCES FROM SCHOOL***

Missing class is detrimental to students' academic work. They miss important material, lose the opportunity to ask questions, and often fall behind on tests and quizzes. While some of this work can be "made-up" (i.e. readings can be done at home and quizzes taken at a different time), many aspects of a class simply are lost. Science labs, for example, cannot be recreated for one student and class discussions or lectures cannot be reconstructed no matter how many conference periods are attended. We do not ask our teachers to be responsible for remediation of a student who has missed school. Furthermore, most courses at Solebury include class participation in calculating an average and absence from class weighs negatively in this area.

***When students miss school, no matter the reason, they must realize that they are risking their academic success.***

We recognize, however, that occasionally situations arise that may necessitate an absence. When that happens, families need to request permission from the Director of Studies (or the College Counselor if the absence is for college visits) at least two weeks in advance. Even with this advance warning, the aforementioned difficulties still apply but there will be no punitive consequence. If the request is made less than two weeks in advance, Solebury School may treat the absence as unexcused.

### ***COLLEGE VISIT PROCESS***

Visiting colleges is essential. Ten minutes on a college campus talking with actual students will reveal more about the school than reading an entire admissions catalog. Schedule as many visits during Solebury vacations as possible, and try to visit when the college's classes are in session. Summer visits are also encouraged to help minimize absences from Solebury classes. Some colleges offer Saturday tours and interviews during the academic year. In addition, we do recommend staying overnight during the college's academic year because this is an excellent way to experience campus life. Many schools have overnight hosts to facilitate this process.

In order to be excused from school for a college visit, students must meet with the College Counselor to discuss their plans and fill out the College Visit Form. At least two weeks before their visit, students must have each of their teachers sign the form and then must return it to the College Counselor. After their visit, students must provide written verification on college letterhead to the college counselor, confirming the date and time of their visit. If students do not follow this procedure, they risk having any absence treated as unexcused.

### 5-4-3 ATTENDANCE RULE

Attendance in class is a requirement of all Solebury courses. Since missing an 80 minute class period will have a significant detrimental effect on learning, our attendance rule states that, in any trimester, students may miss up to **five** class meetings for those classes in a rotating letter block, may miss only **four** Arts classes, and may miss only **three** classes during the spring term if they are going on Senior Project. **This includes both excused and unexcused absences but does not include absences due to religious observations.** The “5-4-3” rule gives our students an easy to remember guideline for our attendance expectations. A student missing more than that number of classes will not get credit for the course and will receive a grade of F for the trimester. If this produces a situation where a student may not be eligible to successfully complete an academic year, s/he may be required to withdraw from Solebury. In extraordinary cases, a student may appeal the application of this rule to the Headmaster, who will appoint an *ad hoc* committee to make a recommendation. Class sessions missed due to late enrollment still count against the Attendance Rule, so it is wise to learn as much as possible about each course prior to enrolling.

### **SENIORS**

In order to qualify for a diploma, a senior must pass all courses attempted or make up the credit. A senior who fails a trimester course in the fall or winter may make up the lost credit by taking an additional trimester course in the following trimester. Failure of a full-year or spring trimester course must be made up in an approved course at an accredited summer school.

### SENIOR PROJECTS

On May 13<sup>th</sup>, some seniors will leave campus to work as apprentices or volunteers, conduct independent research, or pursue creative projects. To qualify, a senior must be in good social and academic standing, have the permission of all his/her teachers, and have a proposal approved by the Senior Projects Committee. Seniors return to campus to present their projects to the school on June 1<sup>st</sup>. For seniors on Senior Project, all coursework ends May 13<sup>th</sup>. Please note that the 5-4-3 Attendance Rule for class absences states that seniors going on Senior Project may only miss three class meetings and still earn credit for that course. This includes the classes that meet in the evening. In addition, seniors placed on Academic Warning in the spring may not be allowed to go on Senior Project.



## ***SPECIAL PROGRAMS and CONCENTRATIONS***

More information about Solebury School's English for Academic Purpose (EAP), Learning Support Program (LS) and various Concentrations are listed at the end of this catalog.

### **GLOBAL EDUCATION CONCENTRATION**

Rising 9<sup>th</sup> and 10<sup>th</sup> grade students may choose to declare a focus in global education. This concentration aims to cultivate globally-minded young adults by providing a path for them to deeply engage in and reflect upon global academic courses, cultural events, service learning, travel immersion experiences, and an independent study. More information can be found at the end of this bulletin. **Global Education Coordinators: Lucienne Knight**

### **STEM (Science, Technology, Engineering, Mathematics) CONCENTRATION**

The STEM concentration at Solebury School gives students an opportunity to go beyond the classroom offerings and dive into their STEM interests. Students choose the path that works best for them to complete the concentration. This includes independent studies, looking at STEM careers and networking with professionals, being engaged in clubs and special events on and off-campus, and taking a wide variety of STEM classes with the guidance of the concentration coordinators.

This concentration is geared towards students who want to have enriching experiences in STEM during their course load at Solebury. Students will work with the STEM coordinators to design a variety of experiences that students will find challenging and engaging. Students will then submit the activity that they completed to keep track of their progress. We believe that STEM students should have experiences that relate the work in STEM with other departments within Solebury to make a well-rounded student while increasing the exposure of the student to STEM.

Students can apply in the spring of 9th grade or during their 10th grade year. They must start by 11th grade in the fall to achieve the certificate. **STEM Concentration Coordinators: Cari Nelson & Michelle Gavin**

### **SOCIAL JUSTICE CONCENTRATION**

The Social Justice Concentration is designed for students who wish to explore issues of equity, whether focused on economics, race, gender, the environment, or any host of justice concerns. Students may be drawn to the concentration because of interest in civil and human rights, including but not limited to anti-poverty work, healthcare, food insecurity, prison reform, or voting rights. This concentration includes both academics and activism. Students are required to take a certain number of courses to fulfill the academic requirement, and are expected to participate in and lead activities. These will include school-based clubs, presentations to the school community, service rooted in social justice, and a capstone project.

The goal of the concentration is to encourage students to participate in their local and global communities through activism, volunteerism, and learning. They will then be in a position to be leaders at Solebury to educate and organize. Students will also learn through the qualifying courses offered that are relevant to social justice. Ultimately, students passionate about a cause will be able to deepen and expand their knowledge, and then share with the Solebury community. **Social Justice Concentration Coordinator: Hanna Howe**

## ***ENGLISH***

Solebury's English teachers are devoted to the ongoing work of striving for equity in our teaching and learning. Students are asked to probe texts and challenge ideas, and our goal is to establish an environment where students feel safe and emboldened to bring their authentic selves to the learning process. We strive to provide content that both reflects and evolves the mindsets of our diverse student body and that propels the critical skills students will carry with them for a lifetime of intelligent, informed, empathetic, and original reading, writing, thinking, and action.

English is required every term. The core curriculum is supplemented by an array of electives inspired by faculty and student interest. Our honors and AP level courses are designed to challenge students to stretch and grow as thinkers and writers. These courses carry more content volume, move at a faster pace, and require mastery of prerequisite skills as well as internal motivation on the part of students in order to find success. Our hope is that the students who elect to take these demanding courses do so with a genuine love of learning and the subject matter. Students taking honors and AP classes are not guaranteed high grades, but they are guaranteed growth, challenge, and enrichment if they fully engage with the material.

Across all grade levels and designations, students are asked to write in many genres. Examples include: expository writing, free writing, creative writing, journal writing, playwriting, persuasive writing and poetry. We teach writing as a process, and guide students through the multi-stage experience of pre-writing, editing, revision, and proofreading. More than anything else, reading and writing are skills of practice, and we provide ample opportunities for students to grow and strengthen their abilities by doing so.

If you have any questions about Solebury School's English Department, please contact department chair Sarah May at: [smay@solebury.org](mailto:smay@solebury.org) or (802) 881-9803

### **YEARLONG COURSES**

**Core English 9: An Introduction to Literary Genres:** Students in this course will develop themselves as keen readers of literature through a focus on fiction, poetry, and drama. In addition to reading long-established canonical texts representing each genre, we will also consider contemporary authors working to further those genres today. Despite the vast expanse of time these texts permit us to travel, we will observe a number of persistent themes and questions that have compelled writers to the page for centuries. Where does the individual belong in society? How do our values and beliefs develop out of the tension that question generates? Why do writers employ particular forms and genres in order to engage with those and other questions? What does each genre offer to that engagement? Students will also be asked to hone their own creative and critical writing skills in multiple genres. We will employ a process-based composition model that encourages thoughtfulness and preparation. Recognizing at all times that writing is rewriting, students will work on editing and revising their compositions using a workshop-style model. We will also work on building our fluency with grammatical conventions and vocabulary with consistent instruction and practice. Throughout each unit, students will also refine their organization and study skills; discussion and discussion preparation skills; and habits of research and citation. ***Required, 6 Credits -- mandatory summer reading assignment.***

**Honors English 9: An Introduction to Literary Genres:** In honors English 9, students are introduced to the various elements of poetry, drama, and short and long fiction and to the craft of the processed writing. As we develop close-reading skills and master the vocabulary of literary inquiry, we will consider the ways in which individuals, communities, values, and journeys interact, mesh, and conflict. We will also explore the ways in which human beings struggle to create identity, often from a variety of complex factors, and consider how humans develop an internal system of meaning for their lives, influenced by both their own experiences and by the values imposed by society. Classes will consist of discussions,

lectures, independent projects, and group work, and a workshop approach to developing formal essays and creative pieces in a variety of modes. Vocabulary development will grow out of work with texts; grammar instruction will be in response to issues that arise in student writing. We will engage in a considerable amount of close reading, with a particular emphasis on examining the author's voice and its role in each text. Throughout each term, students will also have ample opportunity to refine and develop their organizational habits, discussion preparation and execution, and methods of research and citation.

**Honors, Prerequisite:** *completed writing sample and a B+ or higher in 8<sup>th</sup> grade English class, 6 Credits* -- mandatory summer reading assignment.

**Core English 10: World Literature:** The primary goal of Core English 10 is to encourage students to engage with writing that is often overlooked due to the nationality, ethnicity, race or gender of the author. Through novels, short stories, poetry, and oral tales, this course explores modern world literature, history, and culture. In English 10, students are pushed to read actively, to acquire useful vocabulary, to gain command of relevant grammar skills, and to write analytically and creatively. Students can expect to read 25 pages or more per class, and students will be asked to share their ideas about texts through various types of reading responses and discussions. In English 10, the hope is that students will advance their English skills, become interested in the literature and lives of other people, and reflect on their own lives. **Required, Global Education Concentration, 6 Credits** -- mandatory summer reading assignment.

**Honors English 10: World Literature:** Honors English 10 is a world literature course that has the same goals as the Core English 10 course. Students interested in the Honors version of English 10 should want the following: to read up to 35 pages per class; to move through both the Core English 10 grammar and writing skills as well as additional grammar and writing skills; to take on a variety of writing challenges that will push students to hone their skills; to master more vocabulary, both as a group and individually, than that taken on in the Core course; and to learn an advanced vocabulary useful in the analysis of texts. Thus, the Honors English 10 course expects extra effort and a greater time commitment from students. The course is built for students who love reading, writing, analysis of texts, grammar, vocabulary, and discussion—and who want to collaborate with other like-minded students. **Honors, Prerequisite:** *recommendation of teacher and a B+ or higher in English 9 or a B or higher in honors English 9. Global Education Concentration, 6 Credits* -- mandatory summer reading assignment.

**Core English 11: American Literature:** In English 11, students read classic and contemporary works by American writers, develop their reading and discussion skills, and engage with a variety of writing assignments, ranging from traditional five-paragraph essays to experimental poetry. Moving through time from the origins of America to the present day, students in English 11 are exposed to different American literary styles and genres. We read Indigenous myths, explore Harlem Renaissance poems, study a Lost Generation novel, and read stories and essays that reflect American literary movements and societal shifts within the country. Students in English 11 should be comfortable with reading, analyzing and discussing texts; have familiarity with essay writing and creative writing; and be capable of reading up to 30 pages of a novel per class. This class is designed to expose students to American Literature while helping them become more careful readers and more confident writers. **Required, 6 Credits** -- mandatory summer reading assignment.

**Honors English 11: American Literature:** English 11 honors is designed for students who already have a love of language and literature, and want to challenge themselves further in the field. Through this exploration of different literary styles, genres, and voices, students will discover what is distinctive about American literature and how it grows out of our language, culture, and history. Students will read classic and contemporary works that reflect the diversity of American experience and culture. In addition, students will be encouraged to expand their vocabulary, embrace the writing process, and hone their writing skills by writing journals, papers, and creative assignments. Although an attempt will be made to align some of the reading selections in this course with the AP U.S. History curriculum, enrollment in that

course is not a requirement for success in this one. ***Honors**, Prerequisite: recommendation of teacher and a B+ or higher in English 10 or a B or higher in honors English 10. 6 Credits -- mandatory summer reading assignment.*

**AP Language and Composition:** This course will challenge students with college-level content and approaches. It will require a high volume of reading and writing, and the ability to engage in high level discussion and assessment. The focus and practice of the class is on close reading, especially for rhetorical skills and devices. Students will be challenged to learn to identify the many means by which writers make their cases and persuade readers. Partly for this reason, much of the material we read will be of a rhetorical nature, including speeches, articles, essays, and other primary sources. As an eleventh grade class, we will draw primarily from American texts in order to align in part with the eleventh grade social studies sequencing of American history. As a seminar style class, there will be plenty of class discussion to process the material and skills we are learning. Students will also take a variety of assessments to monitor their progress including tests, quizzes, papers, and projects. In addition to honing analytical reading skills, students will also be asked to try their hand at using the many means of persuasion we study. While the work in this class is geared toward success on a culminating exam in the spring term, the applications of the skills will be manifold, including college-level writing and clarity of thought and communication in a professional setting. Students earning a 3, 4, or 5 on the exam may qualify for college credit or advanced placement by colleges they attend. ***AP**, Prerequisite: recommendation of instructor and an A- or higher in Core English 10, or an B+ or higher in honors English 10. 6 Credits -- mandatory summer reading assignment.*

**AP English Literature & Composition:** Students enrolled in AP English Literature & Composition will be introduced to the rigors and pleasures of a college-level literature course. In order to prepare students for the breadth of material included in the AP exam, we will consider works of literature from a wide array of periods, movements, cultures, and genres. We will also refine our critical lexicons through an extensive engagement with literary terminology. By developing fluency with that terminology, we will be better prepared to participate in the ongoing conversation of literary study. While the backbone of the course will be thoughtful discussion, students will be asked to complete a number of in-class writing exercises similar to those encountered on the exam. In addition to these in-class writing assignments, students will compose more refined essays and responses out of class, exhibiting the thoughtfulness, structure, and strength of argument necessary for successful writing. Students earning a 3, 4 or 5 on the AP English Literature and Composition examination may be offered college credit and/or advanced placement by the colleges they attend. ***AP**, Prerequisite: recommendation of instructor and an A- or higher in Core English 11, a B+ or higher in honors English 11, or a B+ or higher in AP Language & Composition. 6 Credits -- mandatory summer reading assignment.*

**Foundations English:** Our 9th - 11th grade level Foundations English classes are designed specifically for students who struggle with language-based learning tasks. The classes are taught in a small group setting by an English teacher who is also a Learning Specialist, and specifically designed to meet grade-level English curricular goals while addressing each student's individual learning needs. To build on strengths and bolster weaknesses in reading and writing, the English Foundations teacher differentiates instruction and paces assignments to provide appropriate support for developing skills and academic growth. Space is limited, and admission into the program is dependent on academic screening and noted challenges. There is an additional fee for this class. *6 Credits*

\*Students who need additional support surrounding executive functioning may opt to apply for both Foundations English and Bridge. Please see the Learning Support program section for additional information about Bridge

## FALL TRIMESTER COURSES

**Personal Essay Writing:** You carry countless stories. Your memories, experiences and thoughts are all inside you waiting to get out. Here's your chance to unload. In this class, you will learn how to turn your life stories into affecting personal essays. These essays will be compelling and vivid. These essays will be structured and meaningful. And, yes, these essays will be perfect for your college application. The overall goal of the class is to help students work on the craft of writing, learn techniques, and develop useful skills. Yet the coursework primarily focuses on helping students complete the written portions of their college applications, including the main essay and supplemental essays. In this class, students can expect to do brainstorming exercises, try various writing prompts, read and critique essays, and do a lot of writing and revising. By the end of the trimester, students should have essays that they are proud to send to colleges. And hopefully, they will also learn what stories are hidden inside them and learn to tell them beautifully. *2 Credits*

**Literature of the Underworld:** In this elective, students will explore literary depictions of a punitive afterlife. From varying cultures and time periods, these texts examine deeply rooted human anxieties surrounding what it means to live a good life and what consequences await those who do not. We will look to religious texts, epic poetry, fiction, drama, and film as we cast our net across the stygian waters of a rich and varied literary tradition. Expectations include a deep engagement with the material as evidenced by participation in class discussions, quizzes, critical writing, a presentation, and creative work. *2 Credits*

**Reading & Writing Poetry:** This elective will promote a trimester-long conversation about how poets uncover and incorporate poetry in their daily lives. Where and how do poems happen? This extended conversation demands a profound openness to exploration and constructive discomfort. Poets in this course are asked to experiment with new ways of writing, of reading, and of thinking about language. Our readings will consist of canonical poetry and contemporary writers as well as, of course, the work of one another. Our engagement with these texts will propel our own creative output (poetry is, after all, a conversation) and our critical acumen as readers of literature. Expectations include a deep engagement with the material as evidenced by respectful participation in classroom discussions (including workshops), quizzes, substantial creative work, critical writing, and an ongoing journal practice. *Honors 2 Credits*

**Playwriting:** How do you write something that tells your story...but through other people? The playwriting class will explore the depths of writing a story for others to tell. We will learn from the basics of what makes a good story to what makes a good play, and we will discover the nuances of writing dialogue and description that someone else will bring to life. Through various prompts and sample scripts, we will build our storytelling muscles and bring together an entire evening's worth of theatre in your own voices, telling your stories! This class will focus on writing your own materials and learning ways to give and take constructive feedback in order to make your best revisions. It will culminate in each student writing a full 10-minute play that we will share with our peers at Solebury. *2 Credits*

**Deciphering the African American Experience (Reconstruction to WW2):** Come join us as we examine the efforts of civil rights leaders at the turn of the 19th and 20th centuries, focusing on the promises of Reconstruction and understanding both the tremendous potential of this moment and the horrendous realities that would later occur. Through a critical interrogation of several different types of sources, students will decipher the true experiences of African Americans as both they and the nation strive to realize a new identity for the newly freed people. At the same time, students will delve into sources to gain knowledge of the widespread racism and fear felt by African Americans as they forged new identities into the mid-twentieth century. Special attention will be given to addressing and acknowledging the various elements of identity and the construction and experience of race. Students will work on refining their reading, writing, and thinking skills as they encounter primary and secondary

resources, films, graphic novels, music, and more. Ultimately, students will work *with* the instructor to create a dynamic, intense, and vibrant classroom experience. **Social Justice. 2 credits, This class may also be taken for social studies credit.**

**Modern Dystopias: Architecture and the Shaping of Human Experience:** Dystopian societies are relatively easy to define as the opposite of utopian ones. They are governed by oppressive and authoritarian regimes, marked by suffering and injustice, and are civilizations in which human experiences are often controlled by technology; in literature and film they are usually set in the future. But what does a dystopian society look like physically, and how does the constructed environment contribute to the shaping and subduing of its populace? In the first part of this course we will examine the ways in which architecture has been used in the past to regulate and shape human behavior, with a particular focus on the fascist regimes of the first half of the twentieth century and their realization in films such as Leni Riefenstahl's *Triumph of the Will* (1935) and Fritz Lang's *Metropolis* (1927), which influenced a whole cinematographic genre. The rest of the course will explore the dystopian novels and short stories of Philip K. Dick and several of the film adaptations of his work, including *Blade Runner* and *Minority Report*, with an eye to how directors and set designers used architecture to enhance the dystopian nature and feel of each story. Students will engage in reading and writing assignments throughout the course and will be required to complete an independent final project which explores and critiques the use of dystopian architecture in a film selected from a provided list. *2 Credits, This class may also be taken for social studies credit.*

**The Art of Fiction:** This class will be offered in the evening, meeting one night per week. It is open to Solebury students as well as the outside community so it will include a mix of students and adults. Note that this course confers only one English credit but students must take at least two English credits each term. Full Course Description to come. *1 Credit*

## WINTER TRIMESTER COURSES

**Coming of Age:** "All children, except one, grow up," wrote J.M. Barrie to launch the classic story of Peter Pan. Yet how do we all grow up? When does childhood end and adulthood begin? In this class, we will explore the experiences, realizations, tensions and awakenings that are part of the coming of age process. We will look at what it has meant to come of age in literature and in history, and also examine how the digital age has changed the way we grow up now. Do today's teens grow up faster? Or, like Peter Pan, do they never grow up at all? To answer these questions, we will use myths, fairy tales, short stories, articles, paintings, poetry and film to explore what it means to navigate the passage between childhood and adulthood. Assignments in this class include narrative writing, poetry, developing a Coming of Age project, and even writing "The Teenagers' Guide to Raising Teenagers". Overall, the goal is to delve into the coming of age topic in a dynamic way, with a classroom full of students who are living the theme. *2 Credits*

**Journalism:** Get the facts. Uncover the truth. Write clearly, concisely and beautifully. These are the goals of this class designed to offer students a crash course in journalism. In this writing-focused elective, students will learn how to structure an article, develop reporting skills, find reliable sources, conduct successful interviews, and write articles that are accurate, creative and informative. In this course, there is an emphasis on writing. Yet we will also read Pulitzer Prize-winning articles to study the best examples of journalism today and discuss various topics, including the history of journalism, the evolution of the media, and journalism ethics. Overall, students will gain important and applicable skills as they learn how to ask questions, talk to people, get answers, conduct research, organize information and write clearly. Essentially, students will discover that the skills that make you a good journalist will also make you a stronger student and a stronger writer. *2 Credits*

**The Gothic & Romanticism:** What happens when we confront the limits of understanding? At times, that confrontation results in exultation and elation. At other times, it results in terror. The interconnected movements of Romanticism and the Gothic seek to explore those confrontations. Romanticism, an aesthetic movement emerging in the late 18th century, serves as a direct rebuttal to the logic-driven rationality and certainty of Enlightenment thinking. This rebuttal, when taken to excess, results in the Gothic. In Romanticism and in the Gothic, emphasis is placed on that which exists beyond our “enlightened” viewpoints. The Romantic and Gothic worlds are worlds of emotion, of imagination, of excessive and overwhelming feeling. This course will explore these interrelated genres as well as the concepts of the sublime, the grotesque. Additionally, we will explore the historical circumstances surrounding these movements in order to locate them within the political, not just aesthetic, revolutionary modes to which they belong. Work will include a deep engagement with the material as evidenced by participation in class discussions, regular homework assignments, critical essays, and creative work.  
*Honors 2 Credits*

**International Horror Literature:** Why do we expose ourselves to the horrific in popular culture? Why do we peek from under blankets at ghastly images on screens? Why do we read tales of the supernatural by flashlight in darkened rooms? This attraction to horror persists across borders, spreading around the globe. Despite this shared appeal, horror itself often takes on different tones based on its cultural origin. In this class we will view examples of horror literature from around the globe, noting how a country or region’s historical positioning influences the content of a text. We will look to the ways in which a popular genre, often dismissed as trivial, is able to communicate deep cultural anxieties. In addition to novels, we will read a substantial amount of short fiction and nonfiction. Because the horror genre has intimate ties to the world of film, cinema will further our pursuit. Expectations include a deep engagement with the material as evidenced by in-class discussion, reading quizzes, creative work, critical writing, a presentation, and final project. *2 Credits, Global Education Concentration.*

**Debating the Civil Rights Movement through Film (1945 to present):** This course will examine the Civil Rights Movement of post-World War II America led by African Americans in the United States as featured in big-screen films from Hollywood and in more traditional historical texts. We will analyze the ways in which screenwriters, directors, scholars, activists, and historians depict the Movement and its larger implications. We will read a wide variety of primary and secondary sources that highlight the key people, issues, events, and debates within the history of the Movement, including, but not limited to, gender and leadership; struggles for civil rights in the south, west, and urban north; the impact of the Cold War on race relations; student activism; movement strategies; and the ultimately the emergence of Black Power. Students will critically assess the various ways the Civil Rights Movement has been depicted in over the decades in film, documentaries, and more traditional historical sources. Class discussions and assignments will help students develop historical perspectives; identify key historical issues and debates within Civil Rights Movement History; support plausible historical arguments; locate relevant information; and express themselves clearly. **Social Justice. 2 credits, This class may also be taken for Social Studies credit.**

**Interrogating Intersectionality, Privilege, and Positionality in Media:** Privilege, Power & Media is a seminar designed to help scholars examine, unpack, and identify their privilege and positionality to deepen their understanding of how inequalities and systemic injustice exist. This course will use current media such as *Little Fires Everywhere*, *Bel-Air*, *The Other Wes Moore*, and *The Privileged Poor* to help frame our discussions and interrogate contemporary research and literature to deepen our understanding of intersectionality. Each participant will be responsible for leading a weekly discussion on one of the assigned research articles. We will collectively identify a social justice issue and write an article to be featured in the *Solebury School Civic Engagement Journal*. **Social Justice. 2 credits, This class may also be taken for Social Studies credit.**

**Diversity and Culture Share:** This is a performance class designed to celebrate the diversity of cultures represented by each person enrolled. Share a song, a poem, a short story, a dance... In this class, students will explore and exchange their personal stories and those of their ancestors through music, dance, poetry, song, and storytelling. The performance aspect of this class will be cultivated from a regular practice of sharing with each other, then in collaboration with the End of Trimester music and dance concert. Grading is based on attendance, regular participation, and the personal growth that tends to happen when we humans listen to and learn from each other's lived experiences. This class is open to all who are interested or curious. *2 Credits, Global Ed and Social Justice Concentration.* This class may also be taken for Art credit.

**The Art of the Personal Essay:** This class will be offered in the evening, meeting one night per week. It is open to Solebury students as well as the outside community so it will include a mix of students and adults. Note that this course confers only one English credit but students must take at least two English credits each term. Full Course Description to come. *1 Credit*

## SPRING TRIMESTER COURSES

**Social Inequalities of the 21st century:** The twenty-first century is witness to groundbreaking technological inventions, social crises that have impacted many peoples lived experiences, and a slew of historical moments that create vast social inequities in a society. This course will be structured as weekly case studies in which students will examine deeply a social crisis that has truly impacted the lives of many people. We will aim to determine the cause and effect of each social crisis, the stakeholders involved, and discuss potential solutions. In this course students will read material from cultural studies scholars, as well as authors, artists and politicians. The true nature of this course is interdisciplinary, and students will be expected to use knowledge and information that have gained from many academic disciplines. *2 Credits.* This class may also be taken for social studies credit.

**Short Story Writing:** Do you like to pretend? Do stories and plotlines scroll through your head, begging to be written down? Do unusual characters populate your subconscious, pleading to be heard? Do you love to write? Or, perhaps after years of writing academic essays and research papers, do you want to just cut loose and try something different? In this class, we will explore the art of short story writing. We will read short stories and examine what makes a good story compelling, gripping, entertaining and affecting. We will also attempt to write our own stories that are compelling, gripping, entertaining and affecting. To do this, we will play writing games, write flash fiction, and discuss various writing techniques and strategies, including how to build believable characters, develop meaningful plots, and use artful language. Anyone can take this class, but it helps to enjoy writing, appreciate good fiction, and possess a willingness to take creative risks. The goal of the class is to indulge your creativity, let your imagination run wild, and introduce you to the art of fiction writing. *2 Credits*

**Podcasting:** This course is designed to help students become better communicators and storytellers through learning how to write, produce and create podcasts. Students will learn about the medium of podcasting and learn to tell their own stories in sound. The class will include lessons on storytelling, interviewing, researching, writing for the ear, and developing a "radio voice". We will also spend time listening to and deconstructing great podcasts. Yet the primary objective of the class is to offer students a hands-on workshop for making original podcasts. The class is project-based, and students will be invited to experiment with creating scripted narrative podcasts, interview podcasts, documentary-style podcasts, fiction podcasts or free-form conversational podcasts. *2 Credits*

**Ecopoetics:** Although poets have long produced works celebrating the beauty and splendor of the natural world, contemporary writers have often been compelled by a more urgent attention to nature and its vulnerability in a world of dizzying and frightening ecological change. This elective will take a deep dive



into the tradition of nature poetry and the rise of this more urgent offshoot we call eco-poetics. In addition to reading a substantial amount of poetry, students will also take in a wide variety of nonfiction and critical writings concerning both literary aesthetics and political activism. Expectations include a deep engagement with the material as evidenced by respectful participation in classroom discussions (including workshops), quizzes, substantial creative work, critical writing, and an ongoing journal practice. *2 Credits*

**Experimental Writers of Color:** This elective will look to writers of color who are engaging in and expanding on the experimental tradition. Unsatisfied with inherited forms and genres, these writers generate bold new works, pushing the limits of what literature can be. While the experimental or avant-garde tradition in literature is well-established, the contributions of writers of color have largely been ignored or underrepresented. Despite this, a tremendous body of work by inventive writers of color has emerged, especially in recent years. The literature we'll consider consists of fiction, essays, poetry, drama, and film. Often, these genres will combine and blend in ways which demand new considerations and new questions about the notion of genre itself. Expectations include a deep engagement with the material as evidenced by in-class discussion, reading quizzes, creative work, critical writing, and a culminating creative-critical project. *Honors, 2 Credits* **Social Justice Concentration.**

**The Art of the Novel:** This class will be offered in the evening, meeting one night per week. It is open to Solebury students as well as the outside community so it will include a mix of students and adults. Note that this course confers only one English credit but students must take at least two English credits each term. Full Course Description to come. *1 Credit*

## ***WORLD LANGUAGES***

Solebury School's World Languages Department offers courses in Spanish and French. The goal of our department is to prepare students to communicate meaningfully in the target language while deepening their understanding of diverse global experiences. We believe that a proficiency-oriented approach to instruction is the best way to build language skills as well as student engagement in language learning. In lower level classrooms (I, II), this looks like a lot of input-based learning through storytelling, reading short novels, exploring simple authentic resources, and building basic tools of conversation. Intermediate levels (III, Conversation & Culture, IV) feature communication-oriented classrooms that delve into discussing cultural, current events, and more complex authentic resources in the target language. Our AP courses focus on increasing proficiency in the realms of interpersonal and presentational speaking and writing in preparation for the AP exam. All courses offered in World Languages fulfill a global studies program credit.

Solebury School students are required to complete French III or Spanish III (with a passing average) in order to graduate. At the end of their three-year requirement, students should be functionally proficient, able to address basic needs and express themselves in day to day interactions in target cultures. All students are strongly encouraged to continue their language studies beyond level III, since many competitive universities expect four or more years of language study.

Language-Centered Trips and Extracurricular Opportunities: We at Solebury School believe that practical, real-life language experience is the perfect complement to the classroom. In addition to regular trips abroad to gain practical experience with the languages and cultures, we partner with the Haut-Lac Bilingual International School in St. Léger, Switzerland and St. Paul's School in Barcelona, Spain to provide an extended study abroad experience and exchange program for interested students. In recent years, Solebury School students and teachers have also gone to Costa Rica, Québec, and France.

The World Language Department promotes culture on campus and connects Solebury to the global community. We sponsor events during and outside the school day, such as an International Movie Night to explore and celebrate the art of cinema in other languages, Language Table Days to practice casual conversation, and several other cultural events on campus.

If you have any questions about Solebury School's World Languages Department, please contact department chair Libby Fifer.:

E-mail: [lfifer@solebury.org](mailto:lfifer@solebury.org) Call: (215) 862-5261 (ext 189)

### ***FRENCH***

**French I:** French I offers a tremendous opportunity for students who have no (or limited) experience with the French language. Through a context-driven and story-based curriculum, students will acquire reading, writing, speaking and listening skills in the target language. Students learn new vocabulary and grammar structures through stories, interviews, videos, narrative texts, music and games. French I topics include numbers, colors, introductions, descriptions, family/heritage, school, daily habits, interests, travel, expression of opinions, future plans, and an exploratory look at countries of the Francophone world. The majority of the class is taught in simple and understandable French to emphasize student comprehension of the language. As students are increasingly exposed to the language, they will acquire new vocabulary and structures, resulting in natural production of French. By the end of this class, students will be exposed to the present, past, and near future tense of common regular and irregular verbs, idiomatic phrases, descriptive language, and practical daily expressions/small talk. French I is an interactional and

communicative class that provides students with a solid foundation in language and culture. **Global Concentration, 6 Credits**

**French II:** French II strengthens and builds on the novice proficiency acquired in French I. By the end of French II, students will be able to express complex ideas and understand native speakers. Their “survival skills” will increase dramatically; at the end of the year, they could travel to a francophone country and really enjoy the people and the culture. Students continue to build vocabulary and explore culture by theme: daily routine and hygiene practices, food culture, housing, and clothing. Grammar studies include an expansion of the passé composé, which they use with the imperfect tense to tell meaningful stories in the past, and the ability to express reflexive and reciprocal actions. *Prerequisite: French I.* **Global Concentration, 6 Credits**

**French III:** French III solidifies students have learned in French I and II while providing more complex and nuanced means of communication. Students further their input and output abilities in the language through continued use and review of previously learned structures. Through a context-driven curriculum, students improve their expressive language by learning to use the simple future and conditional mode (used to discuss hypothetical situations), while practicing and integrating other verb forms. This class utilizes culture and themes to introduce new structures and vocabulary. These include body/health, nature/environment, art, music, current events, and idiomatic phrases. By the end of French III, students are able to hold more philosophical and opinion-based discussions in which they understand and express complex ideas in both oral, aural, read and written form. In this course, students work to review, master, and fluidly integrate essential language concepts, applying them to new topics. French III is an interactional and communicative class that provides students with the opportunity to further their foundation in French language and culture. *Prerequisite: French II.* **Global Concentration, 6 Credits**

**French IV:** In French IV, conducted exclusively in French, students review and expand their skills in spoken and written French. As they continue thematic vocabulary and grammar review and expansion, they will also read complex French and Francophone literature and periodicals, and they will watch French news, films, and videos. By the end of the year, they will be able to hold a conversation in French on a wide variety of topics, including politics and more philosophical subjects. Fourth-year classes are typically where students’ communication skills really take off! At the end of this year, students should be prepared either to take AP French, or to enter a third-year university French course. Assessments include regular oral presentations, tests, quizzes, and compositions. *Prerequisite: French III.* **Global Concentration, 6 Credits**

**French Conversation and Culture:** This conversation-based class is designed to develop and strengthen French conversational fluency through an exploration of current events, history, and cultural traditions in the French-speaking world. Course materials include authentic resources such as international media, literature, music, and films. Students are regularly responsible for class discussions and presentations and should expect to participate actively. French Conversation & Culture can be taken instead of or in addition to French IV or AP French, and is designed for students who would like targeted practice in conversational speaking. Please note that French IV is the prerequisite for AP French. *Prerequisite: French IV or higher (exceptional students who have completed level III, if recommended by their teacher).* **Global Concentration, 6 Credits**

## ***SPANISH***

**Spanish I:** Spanish 1 is a story-based curriculum where students’ exposure to the language is meaningful, repetitive and contextualized, with a focus on aural comprehension. Stories, songs, reader’s theatre, videos, interactive online activities, authentic materials and other resources provide context for learning phrases and vocabulary related to numbers, colors, introductions, descriptions, family, daily

habits, interests, body parts, travel, expression of opinions and future plans, and more. Students read simple novels together as a class, and gradually work toward reading independently. They learn about geography, holidays, customs, history, and culture of a variety of Spanish-speaking countries. Expectations shift from comprehension at the beginning of the yearbook to production as the course, and students' abilities, progress. Similarly, the course's first focus is listening and reading, and writing and speaking are increased throughout the year organically. By the end of the year, students will have a strong enough grasp of the highest frequency verbs and phrases in the Spanish language to communicate in the present tense, have simple conversations about the world around them, and comprehend a great deal more as perceptive listeners. **Global Concentration, 6 Credits**

**Spanish II:** After students are introduced to the language in level I, they continue on their journey of becoming independent participants (rather than passive observers) of the cultures we are studying. The goal of Spanish II is to make students functional travelers who not only enjoy and understand the cultural differences around them, but also communicate with confidence in their interactions with Spanish speakers. This course will expand the student's understanding of language and culture through short stories, games, songs, and other authentic resources. By the end of the year, students will read several novels geared toward beginning language learners, expand the complexity of their writing, and present various topics to their peers both formally and informally. From a grammatical standpoint, students will acquire the fundamentals of the present and past tenses as well as the imperative mood. The content of the course is subject to change based on students' interests and global events. Family, school, travel, clothing, and daily routine are amongst the topics covered throughout the year, anchored by relevant holidays and essential traditions in Spanish-speaking communities. *Prerequisite: Spanish I.* **Global Concentration, 6 Credits**

**Spanish III:** Spanish III strengthens and builds on what students have learned in Spanish I and II. Students are now ready to start producing the language and are encouraged to use their knowledge to communicate in the target language. Through projects and thematic units, such as health and wellness, daily routines, the environment and sustainability, the arts and traveling, and discussing the future, students build their ability to function in a Spanish-speaking environment. Furthermore, by reading stories and articles and watching videos in Spanish, students will strengthen their vocabulary and comprehension. Some of the grammar structures include preterite vs. imperfect, future vs. conditional, the imperative and present subjunctive moods. By the end of the year, students will be able to narrate past events, discuss future and hypothetical situations, offer suggestions, advice and recommendations, express opinions about abstract topics, circumlocute, comprehend native speakers in contextualized situations, and write without relying heavily on outside resources. *Prerequisite: Spanish II.* **Global Concentration, 6 Credits**

**Spanish IV:** This course will expand the student's understanding of language, culture, and literature in Spanish, in order to find new personal interests, abilities, and knowledge. By the end of the year students will read several literature pieces, expand their writing to the essay level, and present various topics to their peers both formally and informally. From a grammatical standpoint, students will have mastered all the major verb tenses by the end of the year, in addition to fine-tuning their understanding of the complex subjunctive mood. While the content of the course is subject to change based on global events, past units have included fine arts, historical figures, personal relationships, volunteerism, amongst other topics. *Prerequisite: Spanish III.* **Global Concentration, 6 Credits**

**Spanish Conversation and Culture.** This conversation-based class is designed to develop and strengthen Spanish conversational fluency through an exploration of current events, history, and cultural traditions in the Spanish-speaking world. These include authentic resources such as international media, literature, and films. Students are expected to be more autonomous and are responsible for class discussions and presentations. It can be taken instead of or in addition to Spanish IV or AP Spanish, and is designed for students who would like targeted practice in conversational speaking. Please note that Spanish IV is the

prerequisite for AP Spanish. *Prerequisite: Spanish IV or higher (exceptional students who have completed level III, if recommended by their teacher).* **Global Concentration, Social Justice Concentration, 6 Credits**

**AP Spanish Language & Culture:** Conducted exclusively in Spanish, this rigorous course analyzes a variety of topics in the Spanish-speaking world from the perspective of six major themes: family and communities, science and technology, beauty and aesthetics, contemporary life, global challenges, and personal and public identities. Students should expect to explore these ideas through intellectual discussions and debates in class, in conjunction with argumentative essays, cultural comparisons, and interpersonal responses both in and outside of class. Formal and informal reading, writing, listening and speaking skills will all be strengthened by the in-depth study of vocabulary and lexical variation. Grammar is not explicitly taught in this course, though students can expect occasional review of advanced grammar concepts. They should enter the class with near mastery of all grammatical structures and modes. This course prepares students to sit for the AP exam in May. With the assistance of the Temas textbook and AP Preparation workbook, authentic sources by native speakers help form the foundation of each lesson. At the end of the year, students should be ready for an upper-level university course in Spanish – and a wide variety of real-life experiences using the Spanish language. *Prerequisite: B or higher in Sp. IV.* **Global Concentration, AP, 6 Credits**

## ***MATHEMATICS***

The primary goal of the Mathematics Department is to develop a curriculum sequence that meets the academic needs of all Solebury School students. Above all, students are encouraged to achieve their highest mathematical potential. Many students desire an aggressive math sequence that provides enriching, challenging opportunities, whereas other students look for a program that will build their confidence and comfort level with a discipline that is difficult for them. In developing a curriculum sequence, we recognize that students come from diverse backgrounds and therefore students are placed into courses that will best fit their individual needs.

The department offers courses that range from Algebra to Advanced Placement Calculus. Additionally, the department offers electives each year that provide students with an opportunity to explore, analyze, and appreciate mathematics through a nontraditional approach. Three years of mathematics are required for graduation with a typical sequence of courses consisting of Algebra I, Geometry, and Algebra II. However, with permission of the Mathematics Department Head and the Director of Studies, certain other paths are possible. Students are encouraged to communicate with their math teacher, school adviser, and parents as they determine the appropriate sequence of courses for their high school program. Additionally, it is important for students in their sophomore and junior years to check the mathematics requirements of potential colleges, as many universities recommend (or require) four years of math from applicants.

All students enrolled in math courses are required to obtain a graphing calculator. Today, calculators are an integral component of the learning process and students need to be adept at using this technology. Additionally, a graphing calculator is required by most colleges as well as on standardized math tests such as the SAT, ACT, SAT II subject tests, and the AP Calculus and Statistics exams. The department strongly recommends that students purchase a TI-84 Plus. The school has a small supply of calculators that can be lent to students for the school year if needed and are distributed on a first come, first served basis. Students who are enrolled in AP Calculus BC are required to have a TI-89 graphing calculator as this calculator allows students to explore concepts and functions that were previously difficult or impossible to examine without the use of computer software programs.

If you have any questions about Solebury School's Mathematics Department, please contact department chair Michelle Gavin:

E-mail: [mgavin@solebury.org](mailto:mgavin@solebury.org)      Call: (215) 862-5261 (ext 132)

## ***MATH SUPPORT PROGRAM***

Math Support Program (MSP) is a learning enrichment and support program which provides innovative resources and a nurturing environment to support the math curriculum at Solebury School. This program includes three main components:

- Algebraic Concepts I
- Algebraic Concepts II
- Geometry Concepts

### **Algebraic Concepts Course I and II and Geometry Concepts**

This three-year math sequence is for students with math disabilities or significant difficulties with math. For some students, one year with math support is needed followed by mainstreamed classes. For others, support is provided for all three levels of mathematics: Algebraic Concepts I, Geometry Concepts and Algebraic Concepts II. Successful completion of this three year sequence fulfills graduation requirements. We offer Algebraic Concepts I every year and teach the Geometry or Algebraic II course every other year.

- Students will discover the fundamentals of algebra through a multisensory and multidimensional type of curriculum.
- By the end of the year of Algebraic Concepts I, students in the program will have a stronger foundation in algebraic concepts. This foundation includes: number sense, operations, analytical analysis, multi-step equations, problem solving, as well as procedural and computational fluency.
- By the end of the year of Algebraic Concepts II, students in the program will have studied the main topics inherent to an Algebra curriculum. These topics include: linear, quadratic, and polynomial functions, radicals, data analysis, exponential functions, and problem solving skills.
- By the end of the year in Geometry Concepts, students in the program will have a stronger understanding of two-dimensional plane Geometry as it applies to polygons, stronger critical thinking skills as it applies to conjectures in proofs, and stronger spatial reasoning.
- Technology will be infused whenever appropriate.
- Additional information and admission requirements provided on the Algebraic Concepts fact sheet.

If you have any questions about Solebury School's Math Support Program, please contact the director of the program, Michelle Gavin.

E-mail: [mgavin@solebury.org](mailto:mgavin@solebury.org)

Call: (215) 862-5261 (ext 132)

## YEARLONG COURSES

**Algebraic Concepts I:** Students will discover the fundamentals of algebra within this course. They will be taught through a multisensory and multidimensional type of curriculum. This course is slower-paced with built-in support for reaching and furthering the analysis of topics covered in Algebra I. These fundamentals include number sense, operations, analytical analysis, two-step equations, problem-solving, procedural and computational fluency. Technology will be infused whenever appropriate. Enrollment in this course is predicated on joining the Math Support Program and entails an additional fee. For a description of the broader program, please see the information above in the Math Department section. *Prerequisite: Recommendation of Director of Math Support. 6 credits*

**Algebra I:** This course thoroughly examines basic algebraic principles. Topics covered include simplifying expressions using the appropriate order of operations, solving first and second degree equations in one variable with both algebraic and graphical methods, solving absolute value equations and inequalities, and the concept of functions. Additionally, students will simplify and solve rational equations as well as examine the basic principles surrounding radical expressions. Students will explore linear and quadratic functions, as well as systems of equations in two variables. Throughout the course, an emphasis will be placed on solving real-world problems with both algebraic and graphical processes. *6 credits*

**Geometry:** The purpose of the course is for students to discover the conjectures and definitions of geometry through hands-on investigations. Students will learn to apply deductive and inductive reasoning as they examine geometric proofs. Relationships and properties such as congruence and similarity will be examined in depth. Additionally, students will investigate the properties of circles, right triangle trigonometry, and formulas relating to plane and solid figures. Inherent in the course is the development of critical thinking skills, logic, and geometrical visualization. Time permitting, an exploration of symmetry and/or a review of algebra will be included at the conclusion of the course, as most students will be entering Algebra II the following year. *Prerequisite: Algebra I. 6 credits*

**Honors Geometry:** This honors version of Geometry is intended for students who plan to follow mathematics through AP Calculus. There will be a more in-depth analysis of topics covered in Geometry, as well as a greater emphasis on critical thinking skills and proofs. *Prerequisite: A- or higher in Algebra I or with teacher recommendation; B or higher in Honors Algebra I or with teacher recommendation. This course may be taken concurrently with Honors Algebra II & Trigonometry. Honors, 6 credits*

**Algebraic Concepts II:** This course is recommended for students who need math support and are interested in developing greater strength on coursework related to algebraic concepts and functions. Content is similar to the regular Algebra II course, however, the pace is slower and with built-in support for reaching and furthering the analysis of topics covered in Algebra II. This course counts as part of the three-year graduation sequence for mathematics. Enrollment in this course is predicated on joining the Math Support Program and entails an additional fee. For a description of the broader program, please see the information above in the Math Department section. *Prerequisite: Algebra I or Algebraic Concepts I. 6 credits.*

**Algebra II:** This course is recommended for students who need a moderately paced approach to Algebra II. The subject matter includes a brief review of first-degree polynomials followed by an in-depth study of higher-power polynomials as well as rational, radical, exponential, and logarithmic functions. Attention is given to the relationship between functions and their graphs. This course enables students to move on to Pre-Calculus, and it fulfills the graduation requirement. *Prerequisite: Algebra I. 6 credits*



**Honors Algebra II and Trigonometry:** A faster-paced and more in-depth analysis of the topics covered in Algebra II. Additionally, this course provides a thorough introduction to trigonometry. This course is recommended for students who plan to follow mathematics through AP Calculus. Students in this course will be prepared for Honors Pre-Calculus. *Prerequisite: A- or higher in Algebra I or Geometry or with teacher recommendation; B or higher in Honors Algebra I or Honors Geometry or with teacher recommendation. Honors, 6 credits.*

**Pre-Calculus:** This course is designed to give students more preparation for calculus by furthering their study of algebra and geometry. Additional topics include an in-depth analysis of trigonometry, an introduction to polar and parametric equations, and conic sections. Successful completion of this course enables students to move on to AP Calculus AB. *Prerequisite: Teacher recommendation in Algebraic II Concepts; B- or higher in Algebra II or with teacher recommendation. 6 credits*

**Honors Pre-Calculus:** This course is a faster-paced and more in-depth analysis of the topics covered in Precalculus. Time permitting, additional topics include: series and sequences, partial fraction decomposition, and an introduction to calculus. Students must have working knowledge of trigonometry concepts prior to entering Honors Precalculus, including: unit circle, sinusoidal functions, trigonometric identities, law of sines and cosines, and solving trigonometric equations. This course enables students to move on to AP Calculus BC. *Prerequisite: A- or higher in Algebra II or with teacher recommendation (students must speak with the department chair for additional summer coursework that must be completed prior to starting the course in the fall); B or higher in Honors Algebra II and Trig or with teacher recommendation. Honors, 6 credits*

**AP Calculus AB (Calculus I):** This course is equivalent to a first semester college calculus course, covering differential and integral calculus. Students will study limits of functions, continuity, derivatives and applications of the derivative. As part of integral calculus, students will examine the definite integral as a limit of Riemann sums, the area under a curve, solving differential equations, and various applications to economics, biological, and physical situations. Students are required to take the AB Advanced Placement exam in May. *Prerequisite: A- or higher in Pre-Calc or with teacher recommendation. AP, 6 credits*

**AP Calculus BC (Calculus I & Calculus II):** This course is a full year calculus course that includes all of the topics covered in AP Calculus AB plus topics typically covered in a Calculus II course at the college level. Technology will be an important part of the class to reinforce work and to interpret results of various experiments and data. This course is faster paced than the AB course and students should be prepared to attend occasional class sessions outside of the regularly scheduled times. Students entering AP Calculus BC should have working knowledge of limits, continuity, and differentiation rules. Students are required to take the BC Advanced Placement exam in May. *Prerequisite: B or higher in Honors Pre-Calc or with teacher recommendation. AP, 6 credits.*

**AP Statistics:** The Advanced Placement course in Statistics is equivalent to a one-semester introductory, non-calculus-based, college course in statistics. The AP Statistics course covers four broad themes which include: exploring data, planning a study, anticipating patterns, and statistical inference. This course is writing intensive. Students who have successfully completed Algebra II and who possess sufficient mathematical maturity are eligible for this course. Students are required to take the Advanced Placement exam in May. *Prerequisite: A- or better in Algebra II and with teacher recommendation. AP, Social Justice Concentration, 6 credits*

**Multivariable Calculus:** This yearlong course is similar to a third semester study of calculus at the collegiate level and is a continuation of the topics typically studied in Calculus I and II. While calculus up until this point has focused on the study of scalar-valued functions of one variable, multivariable

calculus considers multiple inputs and vector-valued outputs and thus students will learn to analyze functions in a multidimensional setting. Familiar topics such as graphing, differentiation, and integration will be extended as students learn about vector algebra and geometry in space, vector-valued functions, functions of several variables, partial derivatives and chain rules, Lagrange multipliers, multiple integration, iterated integrals, and change of variables. Students may exercise the option to take this course for three college credits in “Advanced Calculus” through Delaware Valley University. Registration and tuition payment of \$300 to Del Val will occur during the fall term for interested students. *Prerequisite: AP Calculus BC or with approval of the department chair. 6 credits.*

**Statistics:** This yearlong course is an introduction course in statistics intended for students who want to understand statistics through a wide lens. It is not an AP course and does not follow the AP curriculum. Topics discussed include: displaying and describing data, samples and sample size, the normal curve, regression probability, statistical inference, confidence intervals and hypothesis testing with applications in the real world. Students will be designing, testing and reporting on statistics. ***Social Justice Concentration***, *Prerequisite: Algebra II or taking Algebra II concurrently. 6 credits.*

## FALL TRIMESTER COURSES

**Personal Finance:** This course can be taken in the fall and/or winter trimester. This course will use a mixture of arithmetic and algebraic skills to explore the world of personal finance. Real-word applications will also be incorporated to build upon financial competence. The main topics to be covered include checking and savings accounts, types of credit and managing credit, paying for college, budgeting, investing, taxes, insurance, and consumer skills. *Prerequisite: Completion of Algebra II. 2 credits.*

**Fractal Geometry and Chaos Theory:** Do the flapping wings of a butterfly in Brazil affect our weather in New Hope? Is the coastline of Maine one dimensional, two dimensional, or somewhere in between? One of the newest fields in mathematics, Fractal Geometry and Chaos Theory answers these questions and poses many more. In this course, the concept of iteration is used to explore both fractal geometry and chaos. Iteration of functions on the complex plane generates fractals – objects with infinite detail and fractional dimension. Iteration of functions on the real plane illustrates chaos theory – the notion that small initial changes can eventually lead to large-scale changes. Applications in science, music, and art are emphasized. *Prerequisite: Completion of Algebra II. 2 credits.*

## WINTER TRIMESTER COURSES

**Personal Finance:** This course can be taken in the fall and/or winter trimester. This course will use a mixture of arithmetic and algebraic skills to explore the world of personal finance. Real-word applications will also be incorporated to build upon financial competence. The main topics to be covered include checking and savings accounts, types of credit and managing credit, paying for college, budgeting, investing, taxes, insurance, and consumer skills. *Prerequisite: Completion of Algebra II. 2 credits.*

**Discrete Mathematics:** The purpose of this course is to understand and use abstract discrete structures and to strengthen student's facility with writing mathematical arguments. In particular, this class is meant to explore logic, proofs, sets, relations, functions, counting, matrices, and probability, with an emphasis on applications in computer science. *Prerequisite: Algebra II (may be taken concurrently). 2 credits.*

## SPRING TRIMESTER COURSES

**Intro to Economics:** This course introduces basic economic concepts ranging from the viewpoint of the individual consumer, as well as the business owner to the global economy. This course will be taught by using real life situations to understand the basic concepts of economics. Topics include: production and opportunity cost, allocating scarce resources, the market, productivity, goods and services, inflation, and economic growth. *Prerequisite: none. 2 credits.*

**Probability and Game Theory:** The study of probability and game theory allows students to apply math to real-world situations. In this course, students will learn the major concepts of game theory, a branch of mathematics focused on the application of mathematical reasoning to competitive behavior. They will explore concepts like dominance, mixed strategies, utility theory, Nash equilibria, the Prisoner's Dilemma, and non-zero-sum n-person games. They will also learn how to use tools from probability to analyze and develop successful game strategies. Applications range from politics to penalty kicks, from economics to global thermonuclear war. Class exercises involve individual and group work and may also include fun class tournaments. *Prerequisite: Algebra II (may be taken concurrently). 2 credits.*

## ***SCIENCE***

The Science curriculum at Solebury School provides students with diverse and challenging opportunities to explore the world of Science. Our required courses of Conceptual Physics, taken in the 9<sup>th</sup> or 10<sup>th</sup> grade, and Biology, taken in the 11<sup>th</sup> grade, teach students to think like scientists. In these classes, students develop their critical thinking skills through analysis, problem-solving, observation and experimentation. In addition, these courses give students a basic understanding of our physical universe, and of human beings as physical, biological and psychological beings, so that they can make informed decisions about society and themselves.

As with many of the programs at Solebury, the Science curriculum allows students to follow their own individual interests as they choose courses beyond the graduation requirements. It also allows for flexibility within the core sequence of classes. For students interested in a rigorous academic track, our Honors Science sequence includes students taking Honors Physics, Honors Chemistry and Honors Biology. During the general level sequence, students will take Conceptual Physics, General Chemistry and General Biology. But for those needing more math support in their freshman year, we have a Physical Science option. This class covers chemistry for half the year and physics for the other half of the year with minimal math demands. Intro to Physical Science satisfies the physics graduation requirement. Those students can then move on to Intro to Biology to fulfill the Biology graduation requirement. Electives can be taken starting in 10<sup>th</sup> grade and change regularly in order to provide Solebury students with an incredibly diverse choice of classes. Past elective courses have included Forensic Science, Genetics, Climatology, Physiology of Exercise and Nutrition, and Microbiology.

If you have any questions about Solebury School's Science Department, please contact department chair Cari Nelson:

E-mail: [cnelson@solebury.org](mailto:cnelson@solebury.org)

### **YEARLONG COURSES**

**Introduction to Physical Science:** This class focuses on a half-year of physics and a half-year of chemistry. In physics, students will be exposed to the concepts of motion, energy and waves, and electricity via hands-on learning opportunities. Chemistry will focus on the Scientific Method, arrangement of the periodic table and interactions of elements to form chemical bonds. Students will also focus on writing lab reports. This class is intended for 9<sup>th</sup> and 10<sup>th</sup> grade students who would benefit from an introduction to science and building a foundation of math skills. *No prerequisites. This class counts towards the Physics graduation requirement. 6 credits.*

**Conceptual Physics:** Conceptual Physics is a hands-on introduction to the basic concepts of kinematics, matter, and energy requiring no more than elementary algebra familiar to ninth graders. It will emphasize group work and basic mathematical physics principles. Students are also introduced to the fundamentals involved in writing lab reports. ***Required. No prerequisites, however students should be concurrently enrolled in Algebra I at a minimum.*** Conceptual Physics is intended for 9<sup>th</sup> and 10<sup>th</sup> graders. *6 credits*

**Honors Physics:** This is an algebra-based, introductory and college preparatory physics course. Students begin to develop their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like kinematics and dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, and rotational motion.

***Prerequisites: Geometry and be concurrently taking Algebra II.*** Honors Physics is intended for 9<sup>th</sup> & 10<sup>th</sup> graders. It is not available to those who have already taken a high school physics course. *6 credits.*

**General Chemistry:** In General Chemistry, we apply important concepts from physics, particularly forces and energy changes, to allow us to predict and explain the structure, properties, and behavior of matter. We begin the course discussing the small particle nature of matter and the development of modern atomic theory. Then, we explore how the arrangement of the Periodic Table of Elements is based on the structure of an atom's electron cloud and atomic properties. Next, we relate atomic properties to the formation, structure, and properties of ionic and molecular compounds. Finally, we explore how molecular interactions lead to chemical reactions and learn how to make quantitative predictions about reactions using stoichiometry. Students in General Chemistry can expect to work in groups to conduct experiments and/or use simulations to collect data for analysis and interpretation, discuss their ideas and conclusions with the class, and practice constructing scientific explanations and arguments based on evidence and scientific principles. *Prerequisites: Conceptual Physics and Algebra I.* General Chemistry is intended for 10<sup>th</sup> graders. *6 credits*

**Honors Chemistry:** This is the honors version of the General Chemistry class (above) and is a prerequisite for taking AP Chemistry at Solebury. It is intended to be a rigorous introduction to academic and laboratory practices for students who plan to take science courses in college. In addition to exploring the topics and skills from General Chemistry in greater depth, this class will provide an introduction to thermodynamics, acid-base chemistry, and organic chemistry. There are more demands in this course compared to General Chemistry, and this class will move at a rapid pace. Students in Honors Chemistry can expect to learn via a combination of traditional lecture, class discussions, and laboratory experiments. *Prerequisites: Honors Physics or departmental recommendation or permission of instructor. Students are expected to have strong algebra skills; however, this course may be taken concurrently with Algebra II with permission of the instructor.* Honors Chemistry is intended for 10<sup>th</sup> graders. **Honors, 6 credits**

**AP Chemistry:** AP Chemistry is meant to be taken as a second year of chemistry after taking Honors Chemistry. Students are expected to have a strong understanding of atomic/molecular structure, properties, and interactions, as well as a foundational knowledge of chemical reactions, stoichiometry, and thermodynamics. AP Chemistry will continue the study of thermodynamics in greater depth, introduce new applications of concepts from Honors Chemistry, and explore other major topics in chemistry including chemical kinetics, equilibrium, and electrochemistry. Inquiry-based lab activities are emphasized in AP Chemistry, and students must be highly motivated to complete readings, review problems, and design experiments independently outside of class in order to complete laboratory activities efficiently and successfully. By the end of the course, students are expected to have a foundation in chemistry equivalent to that achieved in a typical first-year college general chemistry course. At the end of the school year, students will take the Advanced Placement (AP) Exam for college credit. *Prerequisites: Honors Chemistry or permission of the instructor.* AP Chemistry is intended for 11<sup>th</sup> and 12<sup>th</sup> graders. **AP, 6 credits**

**Introduction to Biology:** Introduction to Biology is a laboratory science course that looks at the study of living things. Students will hone in on laboratory skills and cover topics including ecology, classification, the cell and plants using projects and experiments to gain a deeper understanding of biological processes and the world we live in. *No Prerequisite. This class is intended for 10<sup>th</sup> and 11<sup>th</sup> graders. This class counts towards your Biology graduation requirement.* A digital textbook will be made available on the first day of class. *6 credits*

**General Biology:** Biology is a laboratory science course that covers the study of living things and allows students to explore a variety of concepts. Biology focuses on the study of life by examining the fundamental concepts of cellular biology, biochemistry, genetics, ecology, evolution, classification and botany. The scientific process and laboratory skills are emphasized along with biology's connection to other scientific disciplines. Outdoor explorations and experimentation are embedded into the curriculum

with relevance to the subject matter. In addition, students learn scientific writing skills and improve their skills in lab experiments. **Required.** Biology is intended for 11<sup>th</sup> graders. *6 credits*

**Honors Biology:** Honors Biology is a laboratory-based course that is designed to familiarize the student with the major concepts of biological science, scientific inquiry, interdependence of organisms, cellular biology, organization of living systems, molecular basis of heredity, and biological evolution. This course provides numerous opportunities for students to develop science laboratory skills, critical thinking, and an appreciation for the nature of science through inquiry-based learning experiences. Investigative, hands-on activities that address the variety of topics associated with high school biology are an integral part of this course. Honors Biology is designed for the highly motivated student with a strong interest in the field of science. Students may choose to sit for the AP Biology exam at the end of the year. *Prerequisites: Honors Chemistry or departmental recommendation.* **Honors.** Biology is intended for 11<sup>th</sup> graders. *6 credits*

**Physics II: Electricity and Magnetism:** This course is meant to be a second-year physics course that explores topics outside of the mechanics topics covered in conceptual or honors physics. This is an algebra-based, introductory physics course in which students can cultivate their understanding of physics through hands-on experimentation, inquiry-based learning, and traditional lecture-style instruction. Topics covered in this course include electricity, magnetism, fluids, thermodynamics, sound, and geometric and physical optics. *Prerequisite: Conceptual Physics or Honors Physics.* Physics II is intended for students in grades 10-12. *6 credits*

**AP Environmental Science:** An introduction to interrelationships among the natural environment, humans, and the human environment, including the biological, social, economic, technological, and political aspects of current environmental challenges. This course focuses on building the scientific framework necessary to understand environmental issues. It explores the structure, function, and dynamics of ecosystems, interactions between living and physical systems, and how human enterprise affects natural systems. It also examines current issues regarding human impacts on environmental quality, including global warming, air and water pollution, agriculture, overpopulation, energy, and urbanization. This class fulfills a global studies program credit. *Prerequisites: Honors Chemistry, Honors Biology or departmental recommendation.* **Global, AP,** *6 credits*

**Honors Human Anatomy and Physiology:** This course will concentrate on the Anatomy and Physiology of the human organism. Topics will include basic anatomical directional terms and taking an in-depth look at each system. Throughout the year, several dissections of organs will be performed and an end of the year dissection of a fetal pig. In addition, there will be one field trip to the Mutter Museum of the College of Physicians and Pharmacy. There is a heavy emphasis upon vocabulary in this course and information will be assigned to students with the expectation that they will learn much of it on their own. Grades will be determined by a series of tests, quizzes, and lab work. There are also two non-fiction books that we will be reading throughout the year called *Complications*, and *Sick Girl*. *Prerequisites: B or better in Biology or taken concurrently with Biology.* Anatomy and Physiology is intended for 11<sup>th</sup> and 12<sup>th</sup> graders. *6 credits*

**AP Computer Science Principles:** AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. *Prerequisites: Introduction to Coding or Game Development.* *6 credits, AP*

**AP Computer Science A:** Get familiar with the concepts and tools of computer science as you learn a subset of the Java programming language. You'll do hands-on work to design, write, and test computer programs that solve problems or accomplish tasks. In this class, you will learn to design programs, develop algorithms, write code to implement algorithms, test program code, correct errors, and document and explain how program code works. Prerequisites: AP Computer Science Principles **AP**, 6 credits

## FALL TRIMESTER COURSES

**Engineering I:** This class is designed to be an educational and entertaining single trimester introduction to applied STEM (Science, Technology, Engineering, and Mathematics) concepts. Using basic aviation concepts as a foundation for design, group and project based learning will be emphasized in this course with a curriculum designed to introduce students to basic engineering design concepts and project management fundamentals necessary to plan and build a project while adhering to an anticipated schedule. Modern skills and technology used to assemble basic projects will be introduced with a focus on design using computers and access to the school's 3D printers, laser cutters and makerspace materials. The technical aspects of coding and computer programming are not emphasized in this course, although students with a more technical background are welcome to contribute additional levels of engineered complexity to their group projects. Counts towards Arts credits. *Prerequisite: None. 2 credits.*

**Engineering II:** This class will work with the applied STEM (Science, Technology, Engineering, and Mathematics) concepts from the Engineering I class and use them to demonstrate projects for practical use. The emphasis of the class will be on the design of projects which reinforce mechanical design skills while incorporating advanced technology including 3D printing and programmable circuit design. Students will learn to independently operate and maintain the IDEA Lab makerspace equipment including the 3D printers and laser cutters. Group and individual final projects will be expected at the end of the trimester, including an opportunity to participate in a regional engineering competition. Students will also have the opportunity to experiment with the schools VR equipment and drones. Prerequisite: Engineering I. 2 credits

**Computer Programming: Introduction to Coding:** This course offers an introduction to computer science covering the foundations of computer science and basic programming, with an emphasis on developing logical thinking and problem-solving skills. Each unit of the course is broken down into lessons. Lessons consist of video tutorials, short quizzes, example programs to explore, and written programming exercises. In this course, you will write and run JavaScript programs in the browser using the CodeHS editor. This course is designed for beginners and does not require any computer programming experience. The course is intended to be highly visual, dynamic, and interactive for new coders. 2 credits

**Game Development:** In this course, you will learn the fundamentals of game development as you program your own exciting projects from scratch in C#. As you iterate with prototypes, tackle programming challenges, and develop your own personal project, you will gain the necessary skills to design and build games using the Unity game engine. No pre-requisites or prior knowledge is required, just bring your curiosity. 2 credits

**Microbiology:** Students will be exposed to identification of microorganisms (bacteria, viruses, parasites, fungi, etc.) using microscopes and basic microbiology lab techniques. We will explore the beneficial and harmful effects that microorganisms have in our world today. There will be labs incorporated into class time. Class will include lecture, lab, research, and projects. *Prerequisite: none. Microbiology is intended for 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> graders. 2 credits*

**Science of Movement and Exercise:** This trimester course will concentrate on the movement of the human body during physical activity. You will have the opportunity to learn the basics of biomechanics, kinesiology, and exercise science. Topics will include anatomical direction, kinematics and kinetics, identifying forces on the body (acceleration, momentum, speed, power, energy), analyzing sport skills and identifying proper movement patterns, biomechanics of strength training, and different types of energy systems used while exercising. This course is intended to be hands on with a lot of movement. We will be going to the weight room frequently and will some days exercise to understand the concepts we are learning. There is a heavy emphasis upon vocabulary in this course and it will be assigned to students with the expectation that they will learn much of it on their own. Grades will be determined by a series of quizzes, homework, and lab work. *Prerequisite: Biology or concurrent with Biology.* This course is intended for 11<sup>th</sup> and 12<sup>th</sup> grade students. *2 credits*

## WINTER TRIMESTER COURSES

**Engineering I:** This class is designed to be an educational and entertaining single trimester introduction to applied STEM (Science, Technology, Engineering, and Mathematics) concepts. Using basic aviation concepts as a foundation for design, group and project based learning will be emphasized in this course with a curriculum designed to introduce students to basic engineering design concepts and project management fundamentals necessary to plan and build a project while adhering to an anticipated schedule. Modern skills and technology used to assemble basic projects will be introduced with a focus on design using computers and access to the school's 3D printers, laser cutters and makerspace materials. The technical aspects of coding and computer programming are not emphasized in this course, although students with a more technical background are welcome to contribute additional levels of engineered complexity to their group projects. *Prerequisite: None. 2 credits.*

**Engineering II:** This class will work with the applied STEM (Science, Technology, Engineering, and Mathematics) concepts from the Engineering I class and use them to demonstrate projects for practical use. The emphasis of the class will be on the design of projects which reinforce mechanical design skills while incorporating advanced technology including 3D printing and programmable circuit design. Students will learn to independently operate and maintain the IDEA Lab makerspace equipment including the 3D printers and laser cutter. Group and individual final projects will be expected at the end of the trimester, including an opportunity to participate in a regional engineering competition. Students will also have the opportunity to experiment with the schools VR equipment and drones. *Prerequisite: Engineering I. 2 credits*

**Forensics:** This course is intended to be an opportunity for students to apply various aspects of previous science classes to the collection and interpretation of physical evidence. The lectures and in-class labs will include a variety of methods of crime scene investigation including inspecting a crime scene, blood spatter analysis, entomology, hair and fiber analysis, fingerprint analysis and other relevant methods of evidence collection. Case studies will also be used to gain a greater appreciation for how forensic investigation is used in the solving of crimes. Coursework includes lectures, hands-on lab activities, and projects. *Prerequisites: None.* Forensics is intended for 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> graders. *2 credits*

**Health:** This course provides an opportunity for students to learn about fitness, nutrition, drug use and abuse, lifestyle choices, sexually transmitted diseases, environmental health issues, birth control and other topics surrounding a person's physical and psychological well-being. This course is intended for 9<sup>th</sup> and 10<sup>th</sup> grade students. *Required 1 credit*

**Computer Programming: Introduction to Coding:** This course offers an introduction to computer science covering the foundations of computer science and basic programming, with an emphasis on



developing logical thinking and problem-solving skills. Each unit of the course is broken down into lessons. Lessons consist of video tutorials, short quizzes, example programs to explore, and written programming exercises. In this course, you will write and run JavaScript programs in the browser using the CodeHS editor. This course is designed for beginners and does not require any computer programming experience. The course is intended to be highly visual, dynamic, and interactive for new coders. *2 credits*

**Robotics:** This course will teach students the foundations of building and programming autonomous robots. The course is designed to get students thinking about the patterns and structure of not just robotics, but also programming and problem-solving more generally. LEGO MINDSTORMS EV3 will be used to provide a structured sequence of programming activities in real-world project-based contexts. No prerequisites or prior knowledge required. *2 credits*

### SPRING TRIMESTER COURSES

**Astronomy:** The Solar System: Exploring Our Cosmic Neighborhood: "The Solar System" is an elective science course. The foundation for the course will be the history of astronomy, and the evolution of mankind's understanding of the stars and planets. Students will begin the trimester investigating the Earth-Moon system, followed by "The Solar System," and finally moving on to stars and galaxies. While this course will offer merely a glimpse of all that there is to learn in the field of astronomy, students should leave the course with the skills and knowledge needed to pursue their interest further if they choose. In addition to the topics covered in this course, students will learn how to use telescopes and other observational techniques. Students will be expected to participate in an evening of observation on campus, and to attend a field trip to an astronomy-based site off-campus. A basic understanding of physics, and both geometry and trigonometry, is useful for students who wish to take this course. *Prerequisite: Biology or taking Biology concurrently.* This course is intended for 11<sup>th</sup> and 12<sup>th</sup> grade students. *2 credits*

**Cybersecurity:** This course provides a foundation in information systems, networking, and cybersecurity. Students have opportunities to apply employability skills and to research careers in the information technology area. They also complete hands-on activities to build a strong foundation in computer hardware and connectivity. No prerequisites or prior knowledge required. *2 credits*

**Engineering I:** This class is designed to be an educational and entertaining single trimester introduction to applied STEM (Science, Technology, Engineering, and Mathematics) concepts. Using basic aviation concepts as a foundation for design, group and project based learning will be emphasized in this course with a curriculum designed to introduce students to basic engineering design concepts and project management fundamentals necessary to plan and build a project while adhering to an anticipated schedule. Modern skills and technology used to assemble basic projects will be introduced with a focus on design using computers and access to the school's 3D printers, laser cutters and makerspace materials. The technical aspects of coding and computer programming are not emphasized in this course, although students with a more technical background are welcome to contribute additional levels of engineered complexity to their group projects. *Prerequisite: None. 2 credits.*

**Engineering II:** This class will work with the applied STEM (Science, Technology, Engineering, and Mathematics) concepts from the Engineering I class and use them to demonstrate projects for practical use. The emphasis of the class will be on the design of projects which reinforce mechanical design skills while incorporating advanced technology including 3D printing and programmable circuit design. Students will learn to independently operate and maintain the IDEA Lab makerspace equipment including the 3D printers and laser cutter. Group and individual final projects will be expected at the end of the

trimester, including an opportunity to participate in a regional engineering competition. Students will also have the opportunity to experiment with the schools VR equipment and drones. Prerequisite: Engineering I. *2 credits*

**Computer Programming: Introduction to Coding:** This course offers an introduction to computer science covering the foundations of computer science and basic programming, with an emphasis on developing logical thinking and problem-solving skills. Each unit of the course is broken down into lessons. Lessons consist of video tutorials, short quizzes, example programs to explore, and written programming exercises. In this course, you will write and run JavaScript programs in the browser using the CodeHS editor. This course is designed for beginners and does not require any computer programming experience. The course is intended to be highly visual, dynamic, and interactive for new coders. *2 credits*

**Health:** This course provides an opportunity for students to learn about fitness, nutrition, drug use and abuse, lifestyle choices, sexually transmitted diseases, environmental health issues, birth control and other topics surrounding a person's physical and psychological well-being. This course is intended for 9<sup>th</sup> and 10<sup>th</sup> grade students. *1 credit*

## ***SOCIAL STUDIES***

The Solebury Social Studies department has designed a program that encourages students to build both skills and content knowledge in a deliberate progression. On the skills side this means laying a foundation that instills critical thinking to best appreciate different perspectives; becoming comfortable with a variety of communication and presentation modes; and developing a proper understanding of the research method and research-based writing. On the content side it means understanding the cultural, economic, political, and intellectual histories of both western and non-western cultures; investigating ethics and the formation of character; and developing a nuanced understanding of US history and government. The sequence runs from 9th to 12th grade and is augmented by a rich array of electives taught by members of the department and part-time instructors with relevant expertise.

Twelve credits in Social Studies are required. Twelve credits must be taken in World History 9 and United States History. Nearly every student elects to take at least 18 credits (3 full years), and many students take more than 24 credits (4 full years). Most courses are organized around seminar style discussions and lean into any interdisciplinary opportunities that present themselves along the way. For those students who want to pursue study at the highest level in high school and college, our program provides excellent opportunities for advanced work through Honors and AP courses beyond our core and elective offerings.

If you have any questions about Solebury School's Social Studies Department, please contact department chair Don Kaplan at: [dkaplan@solebury.org](mailto:dkaplan@solebury.org) or (215) 862-5261

### **YEARLONG COURSES**

**Core Early World History 9:** In Early World History, students spend the year examining the origins of human societies throughout the world. Starting with the Paleolithic Era and spanning to the Post-Classical Era, students will connect historical events to current ones, thus attempting to appreciate how the analysis of history is not simply based on foregone conclusions, but rather, it is a living subject littered with some mystery. Students will take part in a variety of activities, including lively simulations, to explore these concepts. Beyond content, students will work to develop and master a variety of skills crucial to understanding and investigating the world around them. This will include reading and researching a variety of historical sources in order to write thoughtful and comprehensive essays aimed at investigating the complexities of human history. ***Required, Intended for freshmen, except for students in Honors World History 9; Global, 6 credits.***

**Honors World History 9:** From the deep past to the present, the history of humanity has often been viewed as a series of choices in the face of a myriad of problems and solutions, from such issues as food production, protection against aggressors, and the creation and maintenance of social, ideological, and spiritual orders. In Honors World History, students explore these civilizations and interactions between them through the process of historical investigation and practice the skills associated with historical thinking. This class offers students an intense experience in the study of history, delving into complex and challenging primary sources and exploring historical interpretations independently. Classes consist of discussions, presentations, debates, simulations, and more. Students will work to develop and enhance their reading, writing, and thinking skills, and take part in several group and individual projects. Thus, students will learn to think openly and critically about what they read, to identify and express empathy with different historical perspectives, to mount a historical argument, and to develop a deeper understanding of themselves and their place in the world. ***Required, intended for freshmen, except for students in Early World History 9; Honors, Social Justice; Global; 6 credits*** **Prerequisites:** recommendation of teacher and a B+ or higher in 8<sup>th</sup> grade history class & mandatory summer reading assignment.

**Core Ethics:** The purpose of this 10<sup>th</sup> grade yearlong class is to cultivate, develop and enrich students' awareness and understanding of THE PHILOSOPHY OF ETHICS as the relationship between INTELLECTUAL VALUES AND EMOTIONAL VALUES. In particular, through studying information about possible "life philosophies," belief systems and cultures, students are encouraged to analyze and evaluate information and evidence through the use of social science methodology (namely Phenomenology) and historiography, in order to deepen their understanding of self-awareness; perspective; individuality; socialization; prejudice; obedience and authority. The depth of critical thinking that the challenging ideas and process orientation of the class cultivate in the students, prepares students for the advanced work they will undertake in their junior and senior years and beyond. *Recommended for tenth grade. Social Justice, Global, 6 credits.*

**Honors Ethics 10:** We are all endowed with the power to lead ourselves, to support our families, and to engage meaningfully in our social and political worlds. This fact is particularly relevant to sophomores, who stand on the threshold of forging a path in the upper school and beyond. In order for students to make positive contributions to all of their present and future communities, it is essential that they appreciate the ethical weight of their lives. Our intention is not to provide answers; rather, we encourage students to engage in deliberate inquiry and reflection—often the precursor to healthy decision making—that we hope becomes a lifelong habit. In creating this seminar style class, instructors draw content from world history, philosophy, and the social sciences; we introduce students to deep study in these fields and we hope to inspire further study in all of them. We believe that students benefit enormously from study in Ethics, so we designed this full year course to be taken by all sophomores; as such, it reinforces the habits of thought introduced in the 9th grade World History course and prepares students for the advanced work that they will undertake in their junior and senior years. **Honors; Social Justice; Global; 6 credits. Prerequisite:** Teacher Recommendation and a B+ or better in 9th grade History & mandatory summer reading assignment.

**AP World History (Modern):** In AP World History: Modern, students will investigate significant events, individuals, developments, and processes from c. 1200 CE to the present. Students will develop the skills and processes employed by historians such as researching and analyzing primary and secondary sources; developing sophisticated arguments; making historical connections; and writing reasoned essays about continuity and change, comparison, and causation throughout history. We will examine history through the lens of various themes such as: Political Structures (Who holds and exercises power?); Innovation and Technology (How do humans meet challenges?); and Social Structures (How do humans organize themselves and interact with each other?). This course is designed to emulate the pace and rigor of a college-level course. Students enrolled in this class are expected to take the AP exam in early May. **AP, Global, 6 credits. Prerequisite:** recommendation of teacher and a B+ or higher in 9<sup>th</sup> grade history class & mandatory summer reading assignment

**United States History:** United States History is a survey course that examines the development of the United States as a political, social, and economic entity from its 17th-century origins to the present. Special attention will be given to exploring some of the most critical turning points in American history, including the American Revolution, the origins of our Constitution, reform movements, the Civil War and Reconstruction, the Gilded Age, World War I, the Great Depression, World War II, the Cold War, and issues in the United States today. Research skills, creative analysis, and persuasive writing will be core components of the course. Particular attention will also be paid to historiographical questions about objectivity, reliability of evidence and sources, and the selection and interpretation of data. A further aim of the course is to build students' skills in research, argumentation, debate, and the presentation of information. **Required, intended for juniors, except for students in Honors U.S. History or APUSH; Social Justice, 6 credits**

**Honors US History:** In this year-long course, students will work to understand historical events with a theoretical approach based in both history and cultural studies. The history portion will attempt to explain things chronologically, focusing on key moments throughout the history of the nation, starting with the Pre-Columbian period and ending in the Obama-Trump era. Students will examine and understand prevalent themes such as liberation, colonization, and examine the uniqueness of building a nation from a multitude of perspectives and backgrounds. Students will be challenged to think critically about policies, systems, rules, and how a society begins to form. The Cultural Studies component of the course will expose students to the ways in which various theoretical disciplines shape culture, society, and the political realm. Over the course of the year, students will encounter college-level texts, lectures, and resources by peer-reviewed scholars. With writing, students will produce a variety of texts, creative, analytical, and argumentative. Particular attention will be given to focusing how ideas emerge historically and consistently throughout time. Thus, through these diverse lenses, we will come to understand and appreciate how history, popular culture, and a multitude of perspectives creates and shapes the narratives of the American historical experience. **Required, intended for juniors, except in US History or APUSH; Honors; Social Justice; 6 credits** **Prerequisite:** Teacher Recommendation and a B+ or better in 10th grade History & mandatory summer reading assignment.

**AP United States History (APUSH):** This year-long course explores U.S. history from the pre-Columbian period into the 21st century. Together the students and teacher will follow the trajectories of both colonizer and colonized, examine the often-messy process of nation building, and examine America's transformation from a colonial backwater spawned by European nation-states in the 16th and 17th centuries to a great world power by the mid-20th century. Concurrently, the difficult process by which the country's promise of freedom and equality extending to more and more groups over time will also be detailed and analyzed. Students will be challenged to develop and employ historical reasoning and critical thinking skills and to express themselves clearly and confidently both verbally and in writing. This course is discussion-based and is designed to emulate the pace and academic rigor of a college-level course. Students enrolled in this class are required to take the AP exam in early May. **Required, intended for juniors, except in US History or Honors US History; AP; Social Justice; 6 credits, Prerequisites:** Teacher Recommendation and a B+ or better in 10th grade History & mandatory summer reading assignment.

**AP Government and Politics:** This is a course for anyone who wants to better understand the news out of Washington D.C., and how that news shapes, and is shaped, by policy. To do this, students will not only familiarize themselves with the traditional policymaking "linkage institutions" (such as the three branches of government), but also by coming to better understand those institutions that wield great power "behind the scenes" (such as interest groups and the media.) A focus on current events over history allows students to unpack some of the more pressing issues of our time, such as political polarization and voter disenfranchisement. Any student who completes AP US Government will not only be able to form and express their own political views more intelligently; they will also be able to put those views to use as an active participant in the U.S. political system. **Prerequisites:** completion of intensive summer assignment, a B+ or better in 11th grade history, and a demonstrated capacity for independent work. **AP. 6 credits**

**Honors Psychology:** Students who are planning on taking all three psychology electives will have the opportunity to take Honors Psychology. This course allows students to enrich their experience of the referential and structural aspects of psychological concepts and paradigms in order to cultivate a deeper understanding of themselves, others, and the world around them. Honors students will complete extra work including: reading additional material, completing extra writing assignments and group discussions. **Honors; Social Justice; Global; 6 credits** **Prerequisite:** Teacher Recommendation and a B+ or better in 11th grade History.

## FALL TRIMESTER COURSES

**Deciphering the African American Experience (Reconstruction to WW2):** Come join us as we examine the efforts of civil rights leaders at the turn of the 19th and 20th centuries, focusing on the promises of Reconstruction and understanding both the tremendous potential of this moment and the horrendous realities that would later occur. Through a critical interrogation of several different types of sources, students will decipher the true experiences of African Americans as both they and the nation strive to realize a new identity for the newly freed people. At the same time, students will delve into sources to gain knowledge of the widespread racism and fear felt by African Americans as they forged new identities into the mid-twentieth century. Special attention will be given to addressing and acknowledging the various elements of identity and the construction and experience of race. Students will work on refining their reading, writing, and thinking skills as they encounter primary and secondary resources, films, graphic novels, music, and more. Ultimately, students will work *with* the instructor to create a dynamic, intense, and vibrant classroom experience. **Social Justice. 2 credits.** This class may also be taken for English credit.

**Modern Dystopias: Architecture and the Shaping of Human Experience:** Dystopian societies are relatively easy to define as the opposite of utopian ones. They are governed by oppressive and authoritarian regimes, marked by suffering and injustice, and are civilizations in which human experiences are often controlled by technology; in literature and film they are usually set in the future. But what does a dystopian society look like physically, and how does the constructed environment contribute to the shaping and subduing of its populace? In the first part of this course we will examine the ways in which architecture has been used in the past to regulate and shape human behavior, with a particular focus on the fascist regimes of the first half of the twentieth century and their realization in films such as Leni Riefenstahl's *Triumph of the Will* (1935) and Fritz Lang's *Metropolis* (1927), which influenced a whole cinematographic genre. The rest of the course will explore the dystopian novels and short stories of Philip K. Dick and several of the film adaptations of his work, including *Blade Runner* and *Minority Report*, with an eye to how directors and set designers used architecture to enhance the dystopian nature and feel of each story. Students will engage in reading and writing assignments throughout the course and will be required to complete an independent final project which explores and critiques the use of dystopian architecture in a film selected from a provided list. This course is intended for students in grades 10, 11, or 12. **2 credits.** This class may also be taken for English or Art credit.

**Psychology: Theoretical Roots:** The purpose of this class is to introduce students to a variety of psychological perspectives relating to the meaning of "aspects of self." The theme for this trimester is: "Who am I?" Students will be exposed to various schools of thought of some famous psychologists including Freud, Jung, Skinner, Erikson, Fromm, and Adler; and will be asked to analyze selected psychological concepts, including "transference," "ego-defenses," "conscious, subconscious, unconscious," "synchronicity," "stages of development," "compensatory and competitive drives," and "transcending determinism." Students will examine a selection of psychological topics including personality; relationship with self, others, and the world; and mental health. The class will encourage students to utilize the knowledge, skills and understanding acquired in the class to develop a healthy way of relating to their "self/selves," others and the world around them. Students are evaluated: on the quality and quantity of their participation in group and class discussions; on their individual and group presentations; and on a final extensive reflective essay and/or journals and/or multiple intelligence project. **Social Justice, Global; 2 credits**

## WINTER TRIMESTER COURSES

**Debating the Civil Rights Movement through Film (1945 to present):** This course will examine the Civil Rights Movement of post-World War II America led by African Americans in the United States as featured in big-screen films from Hollywood and in more traditional historical texts. We will analyze the ways in which screenwriters, directors, scholars, activists, and historians depict the Movement and its larger implications. We will read a wide variety of primary and secondary sources that highlight the key people, issues, events, and debates within the history of the Movement, including, but not limited to, gender and leadership; struggles for civil rights in the south, west, and urban north; the impact of the Cold War on race relations; student activism; movement strategies; and the ultimately the emergence of Black Power. Students will critically assess the various ways the Civil Rights Movement has been depicted in over the decades in film, documentaries, and more traditional historical sources. Class discussions and assignments will help students develop historical perspectives; identify key historical issues and debates within Civil Rights Movement History; support plausible historical arguments; locate relevant information; and express themselves clearly. **Social Justice. 2 credits, This class may also be taken for English credit.**

**Interrogating Intersectionality, Privilege, and Positionality in Media:** Privilege, Power & Media is a seminar designed to help scholars examine, unpack, and identify their privilege and positionality to deepen their understanding of how inequalities and systemic injustice exist. This course will use current media such as *Little Fires Everywhere*, *Bel-Air*, *The Other Wes Moore*, and *The Privileged Poor* to help frame our discussions and interrogate contemporary research and literature to deepen our understanding of intersectionality. Each participant will be responsible for leading a weekly discussion on one of the assigned research articles. We will collectively identify a social justice issue and write an article to be featured in the *Solebury School Civic Engagement Journal*. **Social Justice. 2 credits, This class may also be taken for English credit.**

**Humanistic Psychology: The Third Force:** The purpose of this class is to introduce students to a variety of psychological perspectives relating to the idea of “being human”. The theme for this trimester is: “Who am I Being?” Students will be exposed to various schools of thought of some famous Humanistic/Existentialist psychologists including Heidegger, Maslow, Rogers, Binswanger, Boss, Frankl, May and Perls and will be asked to analyze selected psychological concepts, including: “freedom,” “authenticity,” “anxiety,” “intentionality,” “self-actualization,” “self-transcendence,” “unconditional positive regard,” “logotherapy,” “Noö-dynamics,” and “Gestalt.” Students will examine a selection of psychological topics including personality, relationship with self, others, the world and mental health. The class will encourage students to utilize the knowledge, skills and understanding acquired in the class to develop a healthy way of relating to their “Way of Being,” as well as others and the world around them. Students are evaluated: on the quality and quantity of their participation in group and class discussions; on their individual and group presentations; and on a final reflective essay/journal and/or a multiple intelligence project. **Social Justice, Global; 2 credits**

## SPRING TRIMESTER COURSES

**Modern Psychology: The Way Forward:** The purpose of this class is to introduce students to a variety of psychological perspectives relating to the idea of “fulfilling potential.” The theme for this trimester is: “How Can I Be My Best Self?” Students will be exposed to various schools of thought of some famous psychologists including: Mihaly Csikszentmihalyi; Tomkins & Ekman, Goleman, Gardner, Seligman, Gottman; and will be asked to analyze selected psychological concepts, including: "Flow," "Affect Imagery Consciousness," “micro expression,” “emotional intelligence,” “dissonance, resonance and leadership,” “multiple intelligences,” “authentic happiness,” “learned optimism,” and “Cascade Model of Relational Dissolution.” Students will examine a selection of psychological topics including personality; relationship with self, others, and the world; and mental health. The class will encourage students to utilize the knowledge, skills and understanding acquired in the class to develop a healthy way of relating to their “self/selves,” others and the world around them. Students are evaluated: on the quality and quantity of their participation in group and class discussions; on their individual and group presentations; and on a final extensive reflective essay and/or journals and/or multiple intelligence project. **Social Justice, Global; 2 credits**

**Social Inequalities of the 21st century:** The 21st century is witness to groundbreaking technological inventions and social crises that have impacted many peoples’ lived experiences. It has also produced a slew of historical moments that have created vast social inequities in a society. This course will be structured as weekly case studies in which students will examine deeply a social crisis that has impacted the lives of many people. We will aim to determine the cause and effect of each social crisis, the stakeholders involved, and discuss potential solutions. In this course students will read material from cultural studies scholars, as well as authors, artists and politicians. The true nature of this course is interdisciplinary, and students will be expected to use knowledge and information that they have gained from many academic disciplines. **Social Justice. 2 credits, This class may also be taken for English credit.**

**Modern United States History:** This class, taken after US History part 1 at another school and it fulfills our graduation requirement in US History for those students. *2 credits*



## ***VISUAL AND PERFORMING ARTS***

Art should challenge the intellectual, creative, and expressive powers of each student. The Arts program teaches a variety of creative skills to develop self-esteem through the successful completion and exhibition or performance of works of art. Six Art credits are required for graduation. Studio Art, Chorus, and Theatre courses earn one credit each trimester. Art History courses earn two credits each trimester. Unless otherwise noted, courses can be repeated for credit.

**Private Music Lessons:** As a service to students, the music department can arrange to provide private lessons to students. These lessons are at the students' expense and are scheduled during the students' free periods and after school. At the moment, we offer lessons in guitar, bass guitar, banjo, flute, violin, piano, viola, saxophone, and drums. We can also provide names of music teachers.

If you have any questions about Solebury School's Arts Department, please contact the appropriate department chair or administrator:

Visual Arts:	Erika Fairchild	email: <a href="mailto:efairchild@solebury.org">efairchild@solebury.org</a>
Film:	Brian Pearson	email: <a href="mailto:bpearson@solebury.org">bpearson@solebury.org</a>
Theater and Dance:	Peter Martino	email: <a href="mailto:pmartino@solebury.org">pmartino@solebury.org</a>
Music:	Cathy Block	email: <a href="mailto:cblock@solebury.org">cblock@solebury.org</a>

### **YEARLONG COURSES**

**Advanced Ceramics:** This class is for students who are very serious about continuing in ceramics. The projects are similar to the assignments in the Ceramics class but the expectations are higher. Students are expected to push themselves harder and focus more on the development of their personal vision. Advanced students will continue to develop their hand-building skills through increasingly complex projects and will continue to develop creative concepts through working in series. Students will begin (or continue) throwing on the wheel. In addition, they will have the opportunity to work with different clay bodies (types of clay), and have their work fired in a wood-fired kiln and experience a Raku firing. Students are expected to participate in all aspects of the running of the Ceramic Studio. This is a yearlong course and cannot be taken on a trimester basis. *Prerequisite: Intermediate Ceramics. 3 credits*

**Advanced Painting and Drawing:** This class is open to more experienced students of painting and drawing. The students will continue to refine basic drawing techniques, such as contour, positive and negative space, composition, and value while working with more complex subjects. They will work with tempera, watercolor, gouache, and acrylic paint on both subjects from life and from their imagination. The class also will introduce oil painting. The students will work toward developing a more personal style and sense of creative expression and will be expected to participate in group critique. This is a yearlong course and cannot be taken on a trimester basis. *Prerequisite: Intermediate Painting and Drawing (taken twice) or permission of the instructor. 3 credits*

**Advanced Photography:** For this class students are expected to know how to fully operate a digital camera of their choice and produce stylized final images related to various projects. Students will be graded on how well they meet their deadlines and the depth of their creative exploration on each project. Students will be given the opportunity to explore the various procedures involved in Studio Photography and controlled lighting conditions when taking portraits or still lifes. We will also explore various genres of photography like portraiture, landscape, documentary and photojournalism. All of our images will be edited using the newest version of Adobe Lightroom and Photoshop and we will be printing our final

work using exhibition quality print paper on high quality inkjet printers. *Students may repeat this class. Prerequisites: Photography I and II, and Introduction to Digital Photography. 3 credits.*

**AP Studio Art:** For students planning to go to Art School, or for those for whom it's even a possibility, this course is a must. Students will develop their portfolios initially through teacher directed assignments and then through student-derived projects. This challenging course is designed with all of the expectations of a college level course and is open to qualified juniors and seniors only. In order to meet the minimum of six hours of studio time, this course will meet during one Arts block, one class in the rotating schedule, and Monday evening Life Drawing. It is expected that at least 50% of the students' work will be done outside of class, so independent initiative is a must to be successful in the class. There are two options for the AP Studio Art Portfolio: Drawing or 2-D Design. Early in the year, the Art Department will meet with students or parents to discuss the differences between the two. Because there are two portfolio options, students may take AP Studio Art twice; however they may not repeat the same portfolio category. Portfolios will be submitted in May and although we hope our students achieve high marks for their portfolios, we are more concerned with their personal development as artists. In order to be accepted into this competitive and rigorous course, students must a) submit an application/contract and a sample of their work for review, and b) successfully complete all of the summer assignments and submit them within the first week of school. *AP. 9 credits. Prerequisite: Advanced Painting and Drawing.*

**Digital Filmmaking, Script to Screen:** In this yearlong course, students will write, produce, and edit short films. This course will provide hands-on experience in production planning, writing, and acting for the camera, as well as lighting, digital cinematography, audio recording, and non-linear editing. The class will meet twice a week during an Arts block; however due to the nature of the assignments some time outside of regular class will be necessary. This course will emphasize the development of skills to use creative thinking for problem solving. A willingness to work as part of a team is a prerequisite, as all projects will be accomplished in groups. *Prerequisite: permission of teacher or any other film course. 3 credits*

**The Solebury Elite Ensemble:** As the title suggests, this is an ensemble designed for the musical student who plays at a very advanced level. Students are admitted by audition or at the discretion of the music director. Though preference will be given to those who are well grounded in the classical style and who can fluently read music notation, students will have the opportunity to study a mix of musical styles with all of their particular characteristics. Each student plays a role in choosing the ensemble's repertoire. Performances at venues throughout the school year will include, but not be limited to a school assembly, a school auction, the end of trimester concert and other off campus venues to be determined. Grading is based on participation and attendance which includes both rehearsals and performances. *Prerequisite: Advanced musicians by invitation and audition. Honors. 3 credits*

**STC: Conservatory:** An intensive advanced placement program designed to elevate the skills of its members through craft, repertoire curation, and exploring new & exciting works. Each two hour evening conservatory style class would be split into skill building and active rehearsal time allowing students to directly apply skills learned into the rehearsal process. The year culminates with a full-scale production, competition performances, and a showcase performance in NYC for industry professionals. This program would be geared towards our most dedicated students focusing on the theater arts. *STC: Conservatory provides opportunities to work with other highly advanced actors, collaborate on exciting projects and new works, while acting as leaders for rising performers in the program. Advanced placement students will be invited to apply and audition. Honors. 3 credits*

**STC: In Residence:** This honors level performance program is designed for students dedicated to the study of the dramatic arts. Resident performers will perform in our honors level “Theater for Activism” production (which will be brought to competition) and have leading roles as well as leadership responsibilities in our Fall immersive theater production and Spring children’s theater tour. Residents will also have one on one coachings to develop their audition repertoire and have the opportunity to audition for a spot in a NYC showcase performance. This class runs concurrently with Art of the Scare/Theater for Activism/STC On Tour - Actors selected for this program will be given priority casting in those productions and do not need to sign up for those courses. ***Advanced actors must meet requirements, apply, and audition.*** *Honors. 3 credits*

**STC: Tech In Residence :** This honors class will be spending the year assisting with the build and design of all of our STC productions with a culminating project of designing and running our spring Residency show. We will fine tune our theater skills and continue to learn about the depths of day to day operations of a theater and the levels of performance spaces and budgets from a friend’s basement blackbox all the way to Broadway. **Prerequisites- Intro to Technical Theater or a theater design course. Approval by application and interview from the technical director.** *Honors. 3 credits*

## FALL TRIMESTER COURSES

### Visual Arts

**Graphic Design 1:** Graphic Design 1 is an introductory course in basic design principles and how they are applied to the world of digital design. From postage stamps to giant billboards, photography to fabric, digital design permeates our environment. Understanding how to apply basic design concepts to the presentation of informative, persuasive and dynamic material is crucial to communicating with an audience. The main emphasis of this course will be the skillful combining of images and text to solve visual problems. Typography, image, space, color and form will be integrated as the year progresses. Students will learn about digital illustration, painting and multi-media solutions through lectures, demonstrations and hands-on experiences. Students will be introduced to Adobe Creative Suite that includes Photoshop, Illustrator and learn to use the laser cutter to create 3-dimensional products. *No prerequisite. 1 credit*

**Art Foundations:** This course introduces beginning students to the basics of painting and drawing with a focus on the Elements of Design. Students will learn to work in pencil, charcoal, gouache, pastel, acrylic, and oil paint. They will start with learning how to draw basic shapes, progress to learning how to use light and shadow to create space and form, and learn how to create engaging compositions. These concepts and techniques will be taught through the lens of the 2 dimensional design elements of line, shape, size, space, color, texture, and value. The class is intended to prepare students for the Intermediate class and is a prerequisite to that class. *No Prerequisite, 1 credit*

**Art of the Book:** The Art of book making has been experiencing a renaissance in the past few years as artists of all types have become interested in the tremendous creative potential book arts offers. Some book artists have created sculptural books that barely resemble what you would think of as a book. Other artists take old books and alter them into spectacular new objects. In this class we will be creating as many different types of books as we possibly can; from traditional sewn books to tab books, star books to altered books, sculptural books and pop up books, accordion books to folding books and the list goes on **and on. There is no limit to what you can do with books. Prerequisites: none. 1 credit**

**Art History: Renaissance:** Many students will be familiar with this Art History course because many of the great masters of European art are household names, or at least Teenage Mutant Ninja Turtles. As we enter the Renaissance period in Europe, new ideas and concerns affect the arts. Humanism appears as a driving influence of the Renaissance, as the Renaissance develops simultaneously in several places over Europe. The Renaissance of the 15th century could be organized by geography, but the Renaissance of the 16th century becomes more complex. The Reformation alters Europe physically and religiously, by the end of the Renaissance Europe is divided into religious camps, which exist to this day. The extremely decorative style of Mannerism (High Renaissance) gives way to a new style that is influenced by Naturalism and seeks drama, (but you will have to take Baroque Art History to find out what happens next) Many would argue that the modern world begins in the Renaissance because of the sudden acceleration of change. Students will have object identification tests, vocabulary/terms quizzes, and daily in class object presentations. If time and schedules allow, we will take a museum trip. *... This class fulfills a global studies program credit and may be taken for Social Studies credit and without regard to sequence. Global. 2 credits*

**Intermediate Painting & Drawing:** This course builds on the techniques and concepts of the foundations class. Students will work in pencil, charcoal, gouache, pastel, acrylic, and oil. This class is designed to help the student build upon their painting and drawing skills through work that is more advanced. Students will work mainly from observation on specific skills such as rendering light and shadow, creating engaging compositions, and will begin to explore how to bring their own creative voice to their work. Students must take two Intermediate level classes to be admitted to the Advanced class. *Prerequisite: Art Foundations (or Intro to Painting & Drawing). 1 credit*

**Intermediate Ceramics:** This class is for students who would like to continue working in ceramics, but are not interested in the intensive year long course. Ceramics students will continue to develop their hand-building skills through increasingly complex projects. They will begin to develop creative concepts through working in series. Students will begin throwing on the wheel. In addition, they may have the opportunity to work with different clay bodies (types of clay), and have their work fired in alternative kilns. Students are expected to participate in all aspects of the running of the Ceramic Studio. *Prerequisite: Intro to Ceramics. 1 credit*

**Introduction to Ceramics:** Students in this introductory course will explore two basic hand-building techniques: pinching (as in pinch pots) and coil construction. With these two techniques, an artist can create almost any object that can be imagined. Each skill helps to develop muscle memory and an understanding of the properties of the clay. Timing plays a big part in ceramic work; consequently, students will learn how to plan and prepare for every project. *No prerequisite 1 credit.*

**Life Drawing:** This class meets on Monday from 7-9 PM and is an advanced class for mature students who wish to work on their portfolio and/or deepen their skills of working from observation. Students must have a working knowledge of contour, gesture, value, and composition, and experience working from life to accurately see form in space and translate it to the two dimensional page. Students will have the opportunity to use the human form as their subject as they advance their drawing skills. This class will broaden the students' repertoire of drawing materials, including pencil, charcoal, conte, pastel, ink, and tempera paint as they explore the creative possibility of using the materials alone and in mixed media pieces. The students will work to develop a personal style and to learn to speak knowledgeably about the work in class critique. The fall trimester class will emphasize traditional skills and drawing techniques with an emphasis on portfolio completion for seniors and beginning preparation for juniors. The winter term will move into more work with color and longer poses. In the spring trimester juniors will be encouraged to continue building their portfolios. In the spring, the work will become more experimental and involve more mixed media. *Prerequisite: Intermediate Painting and Drawing (taken twice) and permission of Art Department. 1 credit.*

**Photography I:** In this course students will learn to use a 35mm film camera and the correct procedures for working in a darkroom. Assignments are generally designed to teach students to set shutter speeds manually and the creative use of apertures. There are no specific brief-based assignments at this level. The object is to get the student to fully understand the operation of a camera to achieve various artistic results. They are given the artistic freedom to capture any subjects they please and from this they will learn about depth of field with regards to aperture and the capturing of movement with various shutter speeds. They will learn how to process and develop film negatives, how to produce contact sheets, and how to create a unified catalogue of images. Ultimately students will produce hand-printed images in the darkroom. *No prerequisite 1 credit.*

**Photography II:** In this course students will expand on their knowledge gained during their Photo II class with more emphasis on project-based briefs and complete manual use of their 35mm camera. We will expand on the various genres initially encountered in Photo I like documentary, portraiture, landscape and photojournalism. They will show expertise in achieving various effects using depth of field, shutter speed,

and the elements of composition and also be able to explore various techniques in the darkroom, using contrast filters and toning. Also in this class students will gain an understanding of the work of professional photographers and how they shoot, compose and light their subjects. We will hold class discussions in which the student will be expected to translate their concepts for fulfilling the various briefs and how they achieved their final prints. *Students may repeat this class. Prerequisite: Photography I, 1 credit*

**Introduction to Film:** Students will be introduced to the art of Filmmaking. Learn how to use video cameras, audio equipment, lights and digital editing software. Students will learn how to come up with new ideas for movies and nurture them into projects. Students will work in groups to evaluate project ideas and turn them into a finished film. Once a project(s) has been picked, students will develop a goal, a timeline and create a plan for how the production process will unfold. Students will then create a script, a shot list and equipment list for each production day. Students will perform all the jobs of a small film production crew including: Actor, Director, Camera operator, sound person, gaffer, grip, etc. Students will finish a group project by the end of the class. *1 credit*

**Cinema Studies:** In this class, we watch movies and analyze them. This course introduces students to the basics of narrative structure and different film genres, with the goal of developing the skills to recognize, describe and enjoy film as an art and entertainment form. Each unit will begin with a cinema studies style lecture on a topic followed by a screening that typifies it. *Students may repeat this course, there is no prerequisite. 1 credit*

**Documentary Filmmaking:** Students will be introduced to documentary or nonfiction filmmaking using digital video and audio. Students will learn what defines a documentary, how to produce a documentary, prepare to go into the field to shoot a documentary, edit the film in post-production, and bring a documentary to the audience. Students can use their phone to capture video, but audio recorders and cameras are provided by the school. The goal of the class is to create a short film (around 3 minutes) that represents something students are interested in. Emphasis will be placed on storytelling as opposed to production. *1 credit*

**Video Editing:** This course is an introduction to the fundamentals of nonlinear video editing. The student will gain an understanding of video formats and concepts of video and audio compression used in recording, editing, and for final display. Cutting techniques will be explored including concepts of continuity, frame matching, using varying angles effectively, editing multi camera footage, techniques to avoid jump cuts and the use of parallel action. An introduction to sound editing will include fundamentals of mixing for film, Foley effects and processing audio to enhance the audience experience. Students will use the following software in this course: Adobe Premiere Pro, Adobe After Effects, Adobe Audition, Adobe Photoshop and Adobe Media Encoder. *1 credit*

**How Things Work:** This is a course where students learn about common mechanical and electrical items which surround us every day. Usually we start with the electrical grid and then move on to magnetic recording using the oscilloscope to illustrate waves and electrical phases, wall dimmers, electric motors, and other magneto-electric apparatus. To supply a rudimentary knowledge of car mechanics, we invite a graduate who has been to diesel engine school to do a guest lecture or two. The IT department covers several sessions to inform students about home computer construction and networking issues. We explore many other areas as well and, where possible, our class time will involve trips to local facilities to see our studies in action. *1 credit*

## Performing Arts

**Art of the Scare:** Do you have a fascination with the macabre and enjoy giving people the chills? If so, then "The Art of the Scare" is the perfect class for you! This spirited and entertaining exploration delves into the intriguing world of immersive haunted attractions. In this class, you will delve into the subculture of passionate individuals dedicated to creating the most bone-chilling haunted houses, mazes, and other grim Halloween attractions. Drawing inspiration from various horror tropes, cinema trends, and scary stories that have terrified the masses over the years, you will work collaboratively to develop your own unique haunted attraction. This includes creating your own themes, backstories, characters, and frights. To further enhance your understanding, we will also visit a local haunted attraction to experience first-hand what truly terrifies us. The course will culminate in a final project where you and your classmates will present your fully-realized haunted attraction to the Solebury Community. Are you ready to embrace the thrill of The Art of the Scare? Join us now and unleash your inner horror genius! *1 credit*

**Acting I:** If you're interested in exploring the world of theatre and acting, this course is the perfect introduction to the craft. Through a variety of exercises and assignments, including improvisation, character development, voice, movement, and scene study, you'll learn the fundamentals of acting. Throughout the course, you'll develop your skills through individual and group work, and you'll have the opportunity to perform in front of a live audience. You'll also learn to analyze scripts, understand the motivations and objectives of characters, and develop your own interpretations of scenes and monologues. By the end of the course, you'll have gained a strong foundation in the craft of acting and will be equipped with the tools necessary to pursue further study and performance opportunities in theatre and other creative fields. Whether you're a beginner or have some experience in acting, this course is perfect for you. *Acting I is a prerequisite for any advanced theater class or program. 1 credit*

**Intro to Technical Theater:** This crash course into the world of backstage theater will teach you the basic skills and tools that are used to create amazing sets, lighting, and soundscapes. You will learn various power tools, building techniques, and the basics of how a performing arts space operates while also helping to build our fall production. In the second half of the term, we will discuss topics in lighting and sound design as well as learn how to implement these designs. *1 credit*

**Ballet / Hip Hop:** This intro class is designed to give an understanding of both ballet and hip hop. We will cover a brief history of ballet and how it made its way to America. We will then develop awareness of alignment, the five feet positions, and other basic ballet vocabulary and technique. Class will include basic barre exercises, as well as center work. We will then end the trimester with a performance piece that we will have learned in class. You will have a fun time learning the secrets, technique, and history of ballet! This course will also explore the history, foundations, and movements of hip hop. We will cover the history of hip hop and its influences on music and culture today. The course will then start with the basic steps of hip hop and we'll transition to choreography. The course will then take that choreography and present it in an end of trimester performance. *1 credit*

**Concert Ensemble:** This ensemble is designed primarily for orchestral instrumentalists, those who play instruments of the violin family, woodwinds, brass, classical/acoustic guitar, piano, harp, etc. Others may be admitted at the director's discretion. Students will engage in a diversity of musical styles through the customized arrangements of the director. Grading is based on regular participation, demonstrated regular practice, and a final trimester concert. *1 credit*

**Vocal Performance Workshop:** Vocal Performance Workshop is a master class on vocal training and performance. It has an emphasis on building vocal technique, learning to constructively critique peers in a workshop setting, and performing. The musical backdrop for this class is vast, ranging from musical theatre songs to contemporary music. Students will perform as an ensemble but will also get monthly (or whatever pace suits the class) themed song assignments. For these assignments, they will perform for the

class, receive feedback, and give a repeat performance after they've incorporated suggestions from the workshop. An example of a monthly theme may be duet month, where the teacher will pair two students together on a selected song. More monthly themes could be: three-part harmony, a month dedicated to a specific artist or musical, and different genres of music, like pop or folk. If any students play an instrument, they will be encouraged to accompany themselves or collaborate with classmates. For the trimester concerts, they will essentially be performing the class's greatest hits—working on group numbers throughout the class and choosing from the best themed assignments. The ensemble will perform with a live pianist and/or house band. This class serves as a good resource for anyone who loves to sing and is ideal for students who plan to audition for collegiate-level music or theatre programs. *1 credit*

**Solsingers:** This is a performance class using group and harmony singing in a variety of styles. Rehearsals will also include physical exercises to enhance and improve vocal skills, breathing, coordination, and rhythmic skills. The musical selections will be prepared for performances at recitals and assemblies. Performing experiences will be enriched with additional kinds of musical understanding; including, but not limited to music theory, listening and history. Self and group assessments will be used for reflection and grading. *No Prerequisite, 1 credit*

**Ear Training and Music Theory:** This class will focus on improving the musician's ear and strengthening music theory knowledge. Students will practice and learn to identify major, minor and b7 intervals by ear, as well as chords with multiple tensions - such as 7's, 6's, b9, #9, b13, etc. Students will do rhythmic and melodic dictation. They will also learn how to build and sing chords. There will be sight singing. Music theory will be the companion in this course. Everything we do will be accompanied by breaking down and explaining the theory involved. Basic music reading skill is needed for this class. The pace of the class will move as it suits the students. Please note this is a two trimester course *2 credits, Honors.*

**Jazz Roots Ensemble:** This ensemble plays everything from mainstream jazz to be-bop and funk. It is a performance based group, and gives feature concerts. This class offers lots of improvisational opportunities. We discuss improvisational techniques, and how to build a solo. Jazz Roots also encourages original composition. We discuss how pieces can be arranged to create a more interesting composition, and how to rehearse a band. Vocalists and instrumentalists are welcome. Prior music training is needed for this class. *Prerequisite: Advanced Proficiency Suggested, Students must have approval of instructor. Honors. 1 credit (fall term)*

**Musical Theatre Dance:** Study some of the award-winning choreographers and choreography from Broadway. This class also incorporates jazz techniques and gives the students the opportunity to experiment with their own choreography. *1 credit*

**Rock Band:** Rock Band plays contemporary and classic rock. Come get the experience of what it feels like to be in a band. Learn about rehearsing a band, and how to make an exciting arrangement for a band. Get into stage presence and performance skills. Rock Band is a performance based group, and gives feature concerts. Vocalists and instrumentalists are welcome. Prior music playing is expected for this class. *Prerequisite: Instrumental Proficiency. 1 credit (fall term)*



## WINTER TRIMESTER COURSES

### Visual Arts

**Art History: Baroque and 18th Century:** The extremely decorative style of Mannerism (High Renaissance) gives way to a new style that is influenced by Naturalism and seeks drama, the Baroque. As with many styles, the reaction to the stout Baroque, is the highly decorative Rococo. By the 18th century, we will hop the pond and focus on the artistic works influencing and developing in the United States. Students will have object identification tests, vocabulary/terms quizzes, and daily in class object presentations. If time and schedules allow we will take a museum trip. ... *This class fulfills a global studies program credit and may be taken for Social Studies credit and without regard to sequence. Global. 2 credits*

**Computer Aided Drawing (AutoCAD):** CAD drafting is the language that architects, planners, and other designers use to communicate with one another on collaborative projects and with builders or fabrication shops. The process allows the viewing of the idea you've had in a scaled relationship, to check that the rooms, moving parts, etc. will fit together and function properly. The drafting process aids in graphic thinking and suggests new avenues of design exploration. *No Prerequisite, 1 credit*

**Art Foundations:** This course introduces beginning students to the basics of painting and drawing with a focus on the Elements of Design. Students will learn to work in pencil, charcoal, gouache, pastel, acrylic, and oil paint. They will start with learning how to draw basic shapes, progress to learning how to use light and shadow to create space and form, and learn how to create engaging compositions. These concepts and techniques will be taught through the lens of the 2 dimensional design elements of line, shape, size, space, color, texture, and value. The class is intended to prepare students for the Intermediate class and is a prerequisite to that class. *No Prerequisite, 1 credit*

**Intermediate Painting & Drawing:** This course builds on the techniques and concepts of the foundations class. Students will work in pencil, charcoal, gouache, pastel, acrylic, and oil. This class is designed to help the student build upon their painting and drawing skills through work that is more advanced. Students will work mainly from observation on specific skills such as rendering light and shadow, creating engaging compositions, and will begin to explore how to bring their own creative voice to their work. Students must take two Intermediate level classes to be admitted to the Advanced class. *Prerequisite: Art Foundations (or Intro to Painting & Drawing). 1 credit*

**Introduction to Ceramics:** Students in this introductory course will explore two basic hand-building techniques: pinching (as in pinch pots) and coil construction. With these two techniques, an artist can create almost any object that can be imagined. Each skill helps to develop muscle memory and an understanding of the properties of the clay. Timing plays a big part in ceramic work; consequently, students will learn how to plan and prepare for every project. *No prerequisite 1 credit.*

**Intermediate Ceramics:** This class is for students who would like to continue working in ceramics, but are not interested in the intensive year long course. Ceramics students will continue to develop their hand-building skills through increasingly complex projects. They will begin to develop creative concepts through working in series. Students will begin throwing on the wheel. In addition, they may have the opportunity to work with different clay bodies (types of clay), and have their work fired in alternative kilns. Students are expected to participate in all aspects of the running of the Ceramic Studio. *Prerequisite: Intro to Ceramics. 1 credit*

**Life Drawing:** This class meets on Monday from 7-9 PM and is an advanced class for mature students who wish to work on their portfolio and/or deepen their skills of working from observation. Students must have a working knowledge of contour, gesture, value, and composition, and experience working from life to accurately see form in space and translate it to the two dimensional page. Students will have the opportunity to use the human form as their subject as they advance their drawing skills. This class will broaden the students' repertoire of drawing materials, including pencil, charcoal, conte, pastel, ink, and tempera paint as they explore the creative possibility of using the materials alone and in mixed media pieces. The students will work to develop a personal style and to learn to speak knowledgeably about the work in class critique. The fall trimester class will emphasize traditional skills and drawing techniques with an emphasis on portfolio completion for seniors and beginning preparation for juniors. The winter term will move into more work with color and longer poses. In the spring trimester juniors will be encouraged to continue building their portfolios. In the spring, the work will become more experimental and involve more mixed media. *Prerequisite: Intermediate Painting and Drawing (taken twice) and permission of Art Department. 1 credit.*

**Photography I:** In this course students will learn to use a 35mm film camera and the correct procedures for working in a darkroom. Assignments are generally designed to teach students to set shutter speeds manually and the creative use of apertures. There are no specific brief-based assignments at this level. The object is to get the student to fully understand the operation of a camera to achieve various artistic results. They are given the artistic freedom to capture any subjects they please and from this they will learn about depth of field with regards to aperture and the capturing of movement with various shutter speeds. They will learn how to process and develop film negatives, how to produce contact sheets, and how to create a unified catalogue of images. Ultimately students will produce hand-printed images in the darkroom. *No prerequisite 1 credit.*

**Photography II:** In this course students will expand on their knowledge gained during their Photo II class with more emphasis on project-based briefs and complete manual use of their 35mm camera. We will expand on the various genres initially encountered in Photo I like documentary, portraiture, landscape and photojournalism. They will show expertise in achieving various effects using depth of field, shutter speed, and the elements of composition and also be able to explore various techniques in the darkroom, using contrast filters and toning. Also in this class students will gain an understanding of the work of professional photographers and how they shoot, compose and light their subjects. We will hold class discussions in which the student will be expected to translate their concepts for fulfilling the various briefs and how they achieved their final prints. *Students may repeat this class. Prerequisite: Photography I, 1 credit*

**Introduction to Filmmaking:** Students will be introduced to the art of Filmmaking. Learn how to use video cameras, audio equipment, lights and digital editing software. Students will learn how to come up with new ideas for movies and nurture them into projects. Students will work in groups to evaluate project ideas and turn them into a finished film. Once a project(s) has been picked, students will develop a goal, a timeline and create a plan for how the production process will unfold. Students will then create a script, a shot list and equipment list for each production day. Students will perform all the jobs of a small film production crew including: Actor, Director, Camera operator, sound person, gaffer, grip, etc. Students will finish a group project by the end of the class. *1 credit*

**Cinema Studies:** In this class, we watch movies and analyze them. This course introduces students to the basics of narrative structure and different film genres, with the goal of developing the skills to recognize, describe and enjoy film as an art and entertainment form. Each unit will begin with a cinema studies style lecture on a topic followed by a screening that typifies it. *Students may repeat this course, there is no prerequisite. 1 credit*

**Video Editing:** This course is an introduction to the fundamentals of nonlinear video editing. The student will gain an understanding of video formats and concepts of video and audio compression used in recording, editing, and for final display. Cutting techniques will be explored including concepts of continuity, frame matching, using varying angles effectively, editing multi camera footage, techniques to avoid jump cuts and the use of parallel action. An introduction to sound editing will include fundamentals of mixing for film, Foley effects and processing audio to enhance the audience experience. Students will use the following software in this course: Adobe Premiere Pro, Adobe After Effects, Adobe Audition, Adobe Photoshop and Adobe Media Encoder. *1 credit*

**Intro to Screenplay Writing:** Students will be introduced to the format and structure of a screenplay and learn how writing for film and television is different from other writing styles. How a full length screenplay differs from 30 and 60 minute broadcast series. Students will generate story ideas, write scenes in screenplay format, introduce interesting characters, write effective dialogue, set up intent and obstacle to the create friction and tension needed to create a strong screenplay, learn how to create a “visual” world by writing strong scene descriptions and action sequences, participate in group writing exercises, and gain a basic understanding of what it takes to actually produce a scene. By the end of this course, students will be ready for Advanced Screenplay Writing where participants will write a complete script. Prerequisites: none. *1 credit*

**Graphic Design 2:** In this course students will continue the exploration of graphic design with an emphasis on the principles of design. Students will learn about the history of typography as well as some of the historical movements in the field of graphics. The main emphasis of this course will be the exploration of problems and possible solutions that integrate the use of dynamic composition; combining images and typography (layering), photography and space (transparency) as effective ways to solve visual problems. Topics of study (which are subject to change) include fundamentals of design (line, shape, value, texture, color, form), graphic design - the new basics (figure/ground, framing, hierarchy, layers, transparency) as well as typography combined with imagery to create a visual story in a narrative form. *Prerequisite: Graphic Design 1 or instructor’s permission. 1 credit*

### **Performing Arts**

**Jazz Roots Ensemble (Honors):** This ensemble plays everything from mainstream jazz to be-bop and funk. It is a performance based group, and gives feature concerts. This class offers lots of improvisational opportunities. Learn improvisational techniques, and how to build a solo. Jazz Roots also encourages original composition. Learn how pieces can be arranged to create a more interesting composition, and how to rehearse a band. Vocalists and instrumentalists are welcome. Prior music training is needed for this class. Please note this is a two trimester course. *Prerequisite: Instrumental Proficiency or better, students must have approval of instructor. Honors. 2 Credits*

**Making Music with Logic Pro:** Logic is a widely used DAW in the music industry today, and is used by music producers, songwriters and artists. There’s a good chance that many records you listen to were made using Logic. In this course the student will explore and learn about making music using Logic Pro. This class will introduce the student to the foundations of Logic and get them up and running so that they can create music using this DAW. The emphasis in this class will be the student working on individual music projects. We will cover making basic tracks, both audio and midi, and introduce the student to mixing tracks. *1 credit*

**Rock Band:** Rock Band plays contemporary and classic rock. Come get the experience of what it feels like to be in a band. Learn about rehearsing a band, and how to make an exciting arrangement for a band. Get into stage presence and performance skills. Rock Band is a performance based group, and gives

feature concerts. Vocalists and instrumentalists are welcome. Prior music playing is expected for this class. Please note this is a two trimester course. *Prerequisite: Instrumental Proficiency or better. 2 credits*

**Solsingers:** This is a performance class using group and harmony singing in a variety of styles. Rehearsals will also include physical exercises to enhance and improve vocal skills, breathing, coordination, and rhythmic skills. The musical selections will be prepared for performances at recitals and assemblies. Performing experiences will be enriched with additional kinds of musical understanding; including, but not limited to music theory, listening and history. Self and group assessments will be used for reflection and grading. *No Prerequisite, Please note this is a two trimester course. 2 credits*

**Vocal Performance Workshop:** Vocal Performance Workshop is a master class on vocal training and performance. It has an emphasis on building vocal technique, learning to constructively critique peers in a workshop setting, and performing. The musical backdrop for this class is vast, ranging from musical theatre songs to contemporary music. Students will perform as an ensemble but will also get monthly (or whatever pace suits the class) themed song assignments. For these assignments, they will perform for the class, receive feedback, and give a repeat performance after they've incorporated suggestions from the workshop. An example of a monthly theme may be duet month, where the teacher will pair two students together on a selected song. More monthly themes could be: three-part harmony, a month dedicated to a specific artist or musical, and different genres of music, like pop or folk. If any students play an instrument, they will be encouraged to accompany themselves or collaborate with classmates. For the trimester concerts, they will essentially be performing the class's greatest hits—working on group numbers throughout the class and choosing from the best themed assignments. The ensemble will perform with a live pianist and/or house band. This class serves as a good resource for anyone who loves to sing and is ideal for students who plan to audition for collegiate-level music or theatre programs. *1 credit*

**Concert Ensemble:** This ensemble is designed primarily for orchestral instrumentalists, those who play instruments of the violin family, woodwinds, brass, classical/acoustic guitar, piano, harp, etc. Others may be admitted at the director's discretion. Students will engage in a diversity of musical styles through the customized arrangements of the director. Grading is based on regular participation, demonstrated regular practice, and a final trimester concert. *1 credit*

**Advanced Topics in Lighting Design:** This course will take the wide scope of the usual Lighting Design course and zoom in to the finer ins and outs of making art with lighting. We will take an in depth look at how industry standard lighting fixtures work, how to choose the right fixtures for the job, and how to approach design for different types of performances. Some projects may include light design for video, music, and performance. ***Prerequisites:*** Lighting Design or Intro to Technical Theater. *1 credit.*

**Theater for Activism:** The Theater for Activism course offers high school students the opportunity to partner with an organization and create a powerful piece of theater that promotes awareness of an important and relevant cause. Through this course, students will develop their acting skills while using theater as a tool for social change. They will collaborate with their peers and community partners to create a meaningful performance that inspires action and raises awareness about critical issues. This course is ideal for students who are passionate about theater and social justice, and who want to use their skills and talents to make a positive impact on the world. ***Theater for Activism is open to STC:Conservatory/In Residence performers or through invitation to audition after completion of Acting 1. Honors. 1 credit***

**Beyond Broadway: Discovering Underappreciated Theater:** This course focuses on exploring lesser-known shows like "Passing Strange," "Ghost Quartet," and "35mm," giving students a deeper understanding and appreciation of the diversity and richness of theatrical expression. This non-performance based course is perfect for students who love theater but do not necessarily want to be on stage. Through lectures, discussions, and hands-on activities, students will examine the works of underappreciated playwrights, directors, and designers who have made invaluable contributions to the

field. By watching video clips and attending live performances, students will be exposed to a variety of shows that they may not have otherwise been familiar with. Through this course, they will gain a newfound appreciation and understanding of the art of theater and its impact on society. *1 credit*

**Swing Dance:** This partner dance from the 1920s, '30s, and '40s is all the rage. Come and see why it is one of the most popular courses at Solebury. *1 credit*

**Ballet / Hip Hop II:** This intro class is designed to give an understanding of both ballet and hip hop. We will cover a brief history of ballet and how it made its way to America. We will then develop awareness of alignment, the five feet positions, and other basic ballet vocabulary and technique. Class will include basic barre exercises, as well as center work. We will then end the trimester with a performance piece that we will have learned in class. You will have a fun time learning the secrets, technique, and history of ballet! This course will also explore the history, foundations, and movements of hip hop. We will cover the history of hip hop and its influences on music and culture today. The course will then start with the basic steps of hip hop and we'll transition to choreography. The course will then take that choreography and present it in an end of trimester performance. *1 credit*

**Diversity and Culture Share:** This is a performance class designed to celebrate the diversity of cultures represented by each person enrolled. Share a song, a poem, a short story, a dance... In this class, students will explore and exchange their personal stories and those of their ancestors through music, dance, poetry, song, and storytelling. The performance aspect of this class will be cultivated from a regular practice of sharing with each other, then in collaboration with the End of Trimester music and dance concert. Grading is based on attendance, regular participation, and the personal growth that tends to happen when we humans listen to and learn from each other's lived experiences. This class is open to all who are interested or curious. *2 credits*, **Global Ed and Social Justice Concentration**. This class may also be taken for English credit.

## SPRING TRIMESTER COURSES

### Visual Arts

**Art History: 19th Century, Modernism and Avant-Garde:** There is no other way to describe this course but Wow! If you thought things changed fast during the Renaissance, the pace for change accelerates exponentially as we enter the 19th and 20th Centuries. We have the developments of modern science and industrialization. America fully assumes a role in the art world. There are more “-isms” than you can shake a stick at. Artists are looking forward and looking back, there are movements and counter movements: it is a tremendously exciting time. Although this class covers a mountain of information, students will feel very comfortable as most of the art will be very familiar. Some of the many artists we will study are: David, Delacroix, Goya, Turner, Rousseau, Millet, Manet, Renoir, Picasso, Mondrian, Moore, O’Keeffe, Calder, Warhol, and so many more you will be surprised how many you will recognize. Students will have object identification tests, vocabulary/terms quizzes, and daily in class object presentations. If time and schedules allow we will take a museum trip. *This class fulfills a global studies program credit and may be taken for Social Studies credit. Global. 2 credits*

**Intermediate Painting & Drawing:** This course builds on the techniques and concepts of the foundations class. Students will work in pencil, charcoal, gouache, pastel, acrylic, and oil. This class is designed to help the student build upon their painting and drawing skills through work that is more advanced. Students will work mainly from observation on specific skills such as rendering light and shadow, creating engaging compositions, and will begin to explore how to bring their own creative voice

to their work. Students must take two Intermediate level classes to be admitted to the Advanced class.  
*Prerequisite: Art Foundations (or Intro to Painting & Drawing). 1 credit*

**Intermediate Ceramics:** This class is for students who would like to continue working in ceramics, but are not interested in the intensive year long course. Ceramics students will continue to develop their hand-building skills through increasingly complex projects. They will begin to develop creative concepts through working in series. Students will begin throwing on the wheel. In addition, they may have the opportunity to work with different clay bodies (types of clay), and have their work fired in alternative kilns. Students are expected to participate in all aspects of the running of the Ceramic Studio.  
*Prerequisite: Intro to Ceramics. 1 credit*

**Life Drawing:** This class meets on Monday from 7-9 PM and is an advanced class for mature students who wish to work on their portfolio and/or deepen their skills of working from observation. Students must have a working knowledge of contour, gesture, value, and composition, and experience working from life to accurately see form in space and translate it to the two dimensional page. Students will have the opportunity to use the human form as their subject as they advance their drawing skills. This class will broaden the students' repertoire of drawing materials, including pencil, charcoal, conte, pastel, ink, and tempera paint as they explore the creative possibility of using the materials alone and in mixed media pieces. The students will work to develop a personal style and to learn to speak knowledgeably about the work in class critique. The fall trimester class will emphasize traditional skills and drawing techniques with an emphasis on portfolio completion for seniors and beginning preparation for juniors. The winter term will move into more work with color and longer poses. In the spring trimester juniors will be encouraged to continue building their portfolios. In the spring, the work will become more experimental and involve more mixed media. *Prerequisite: Intermediate Painting and Drawing (taken twice) and permission of Art Department. 1 credit.*

**Collage and Mixed Media:** Collage is an art form that uses a wide variety of found materials combined in a single piece of artwork. In this class students will bring together pieces from magazines, natural objects, advertising, and many other sources to create original works of art. The class will also use paint and other traditional materials to go with the collage elements. This class is a wonderful opportunity for students to explore their creativity through a class where they don't have to be "good at art." *No prerequisite 1 credit.*

**Printmaking:** Printmaking is all about working with the printing process, particularly with monotype, masking, chine-collé and block print. Students are given a few techniques to work with in the beginning of class; as they print, they learn how to apply the inks, how to hand-print, how to use the press, and how to mix the inks to achieve the effects they desire. The students also learn how to layer colors to develop depth in their work. Once students have a fairly good grasp of the basics, they are given more techniques that they are then expected to experiment with and incorporate into what they have already learned. Students will be expected to participate in group and individual critiques, submit 10 finished prints and complete self-assessments. *Students may repeat this course, there is no prerequisite. 1 credit*

**Graphic Design 1:** Graphic Design 1 is an introductory course in basic design principles and how they are applied to the world of digital design. From postage stamps to giant billboards, photography to fabric, digital design permeates our environment. Understanding how to apply basic design concepts to the presentation of informative, persuasive and dynamic material is crucial to communicating with an audience. The main emphasis of this course will be the skillful combining of images and text to solve visual problems. Typography, image, space, color and form will be integrated as the year progresses. Students will learn about digital illustration, painting and multi-media solutions through lectures, demonstrations and hands-on experiences. Students will be introduced to Adobe Creative Suite that

includes Photoshop, Illustrator and learn to use the laser cutter to create 3-dimensional products. *No prerequisite. 1 credit*

**Video Editing:** This course is an introduction to the fundamentals of nonlinear video editing. The student will gain an understanding of video formats and concepts of video and audio compression used in recording, editing, and for final display. Cutting techniques will be explored including concepts of continuity, frame matching, using varying angles effectively, editing multi camera footage, techniques to avoid jump cuts and the use of parallel action. An introduction to sound editing will include fundamentals of mixing for film, Foley effects and processing audio to enhance the audience experience. Students will use the following software in this course: Adobe Premiere Pro, Adobe After Effects, Adobe Audition, Adobe Photoshop and Adobe Media Encoder. *1 credit*

**Advanced Video Editing:** Learn advanced video editing techniques including graphic animation, editing with proxies, editing multiple cameras simultaneously, tracking and rotoscoping masks, creating a nested sequence, using Audition to enhance your audio, appropriate editing to music and much more. You must have a solid foundation in Adobe Premiere. (Permission of instructor required). *1 credit*

**Photography II:** In this course students will expand on their knowledge gained during their Photo II class with more emphasis on project-based briefs and complete manual use of their 35mm camera. We will expand on the various genres initially encountered in Photo 1 like documentary, portraiture, landscape and photojournalism. They will show expertise in achieving various effects using depth of field, shutter speed, and the elements of composition and also be able to explore various techniques in the darkroom, using contrast filters and toning. Also in this class students will gain an understanding of the work of professional photographers and how they shoot, compose and light their subjects. We will hold class discussions in which the student will be expected to translate their concepts for fulfilling the various briefs and how they achieved their final prints. *Students may repeat this class. Prerequisite: Photography I, 1 credit*

**Introduction to Digital Photography:** Within this course we will be covering the basics of how to use a digital camera on a manual setting to achieve images of highest quality and strong composition. Students will be given class assigned briefs to complete in their own time and be expected to meet deadlines and discuss their ideas and concepts within class discussions and with written papers. Students will also receive an introduction to the newest version of Adobe Photoshop and Lightroom and understand the process of editing and manipulating our images to a high standard within these programs. *Students may repeat this class. 1 credit.*

**Introduction to Film II:** Intro to Film Production II is a continuation course of Intro to Film, designed to take the skills and knowledge acquired in Intro 1 and expand on them. As a class, we will briefly review what we have learned previously, go through each stage of production at a quicker pace, and by the course's end you will be able to manufacture a short film from start to finish with little to no supervision required. We will also go into deeper examination of film analysis, and theory. As well as advanced filming and editing techniques and processes. *1 credit*

**Cinema Studies:** In this class, we watch movies and analyze them. This course introduces students to the basics of narrative structure and different film genres, with the goal of developing the skills to recognize, describe and enjoy film as an art and entertainment form. Each unit will begin with a cinema studies style lecture on a topic followed by a screening that typifies it. *Students may repeat this course, there is no prerequisite. 1 credit*

**Metalworking:** Metalworking requires the student to provide one or more metal sculptures of their design using the tools and processes of cutting, sawing, drilling, welding, brazing, and soldering. Miscellaneous

metal pieces are provided for the students to select or modify to their taste. For ironwork, stick welding and MIG welding are employed along with oxyacetylene cutting, use of the chop saw and portable band saw. For lighter metalwork, brazing and soldering are explained. Designs are encouraged to honor balance and interest while not being totally symmetrical. Two judges, at the end of the course, are invited to view the student work; one is an artist, for aesthetic achievement, the other an experienced metalworker from the area to judge excellence of welding and brazing technique and structural aspects. Helmets, aprons, brazing goggles, and other safety equipment is provided and its use is required. *1 credit*

### **Performing Arts**

**Improv for Anxiety:** Improv for Anxiety is a unique course where students will learn to apply improvisational techniques to their daily lives to help them cope with stressful situations, improve their social skills, and build their confidence. Throughout the course, students will participate in a variety of exercises and games designed to help them become more comfortable with uncertainty and spontaneity. They will learn to embrace mistakes, take risks, and work collaboratively with others to create something new. This class will leave students with new tools to help them feel more present, positive, and in sync with themselves and the world around them. *A safe space for students to express themselves creatively at their own pace and comfort without judgement. 1 credit.*

**STC On Tour: A Children's Theater Experience:** The student-led children's theatre production offers a unique opportunity for students to hone their skills in theatre production, while also making a positive impact in the community. The program is designed to provide a platform for students of all skill levels to showcase their talents, in a supportive, collaborative environment. Students will work together to rehearse and prepare a touring production that is tailored for young audiences. Through the program, they will gain practical experience in various aspects of theatre production, such as set & costume design. This hands-on approach to learning will enable students to develop a range of practical skills that are essential for a career in the performing arts. The production will be performed at local schools as part of all school service day. In addition, the production will also be staged on a Saturday afternoon on campus, providing an opportunity for the wider community to enjoy the show. *1 credit.*

**Choreography:** Choreography is tailor made for advanced dancers. Use your skills to compose pieces to music, spoken word or silence. You will have an opportunity to teach others your work and perform at our end of the trimester concert. *1 credit.*

**Tap Dance:** Create percussive rhythms with your feet as you explore tappers who have come before as well as current ones who are setting the stages on fire. *1 credit.*

**Concert Ensemble:** This ensemble is designed primarily for orchestral instrumentalists, those who play instruments of the violin family, woodwinds, brass, classical/acoustic guitar, piano, harp, etc. Others may be admitted at the director's discretion. Students will engage in a diversity of musical styles through the customized arrangements of the director. Grading is based on regular participation, demonstrated regular practice, and a final trimester concert. *1 credit*

**Vocal Performance Workshop:** Vocal Performance Workshop is a master class on vocal training and performance. It has an emphasis on building vocal technique, learning to constructively critique peers in a workshop setting, and performing. The musical backdrop for this class is vast, ranging from musical theatre songs to contemporary music. Students will perform as an ensemble but will also get monthly (or whatever pace suits the class) themed song assignments. For these assignments, they will perform for the class, receive feedback, and give a repeat performance after they've incorporated suggestions from the workshop. An example of a monthly theme may be duet month, where the teacher will pair two students



together on a selected song. More monthly themes could be: three-part harmony, a month dedicated to a specific artist or musical, and different genres of music, like pop or folk. If any students play an instrument, they will be encouraged to accompany themselves or collaborate with classmates. For the trimester concerts, they will essentially be performing the class's greatest hits—working on group numbers throughout the class and choosing from the best themed assignments. The ensemble will perform with a live pianist and/or house band. This class serves as a good resource for anyone who loves to sing and is ideal for students who plan to audition for collegiate-level music or theatre programs. *1 credit*

**Indie Music and The Music Biz:** This class will examine ways in which the indie artist navigates their career. The music industry landscape changed forever with the arrival of the internet. For decades, there was only one true vehicle to get your music heard and one path to take. The internet has made it possible for everyone to have a voice, and has allowed the artist to reach out directly to an audience. It doesn't mean it's easier, but it does mean it's different. This occurrence has empowered the listener even more. This class will delve into and study the various strategies that the independent artist uses to build their career. We'll learn about some of the mechanics of the music business, such as copyrights, royalties, performance rights organizations, publishing and sync. We'll examine who some of the more successful indie artists are and what they did to get there. We'll zoom with some of the artists we cover. There will be ample opportunity for debate, and for students to introduce to the class, who they think the trend setters or significant indie artists are. *1 credit*

## COMPUTERS

The Computer Department offers courses in the Arts as well as coding. More advanced work includes self-paced programming, web design and AP classes.

### YEARLONG COURSES

**AP Computer Science A:** Get familiar with the concepts and tools of computer science as you learn a subset of the Java programming language. You'll do hands-on work to design, write, and test computer programs that solve problems or accomplish tasks. In this class, you will learn to design programs, develop algorithms, write code to implement algorithms, test program code, correct errors, and document and explain how program code works. Prerequisites: AP Computer Science Principles, **AP**, 6 credits

**AP Computer Science Principles:** AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. Prerequisites: Computer Programming, Introduction to Coding or Game Development, **AP**, 6 credits

### TERM CLASSES

**Graphic Design 1:** Graphic Design 1 is an introductory course in basic design principles and how they are applied to the world of digital design. From postage stamps to giant billboards, photography to fabric, digital design permeates our environment. Understanding how to apply basic design concepts to the presentation of informative, persuasive and dynamic material is crucial to communicating with an audience. The main emphasis of this course will be the skillful combining of images and text to solve visual problems. Typography, image, space, color and form will be integrated as the year progresses. Students will learn about digital illustration, painting and multi-media solutions through lectures, demonstrations and hands-on experiences. Students will be introduced to Adobe Creative Suite that includes Photoshop, Illustrator and learn to use the laser cutter to create 3-dimensional products. Counts as an Arts credit. *No prerequisite. 1 credit (offered Fall & Spring Terms)*

**Graphic Design 2:** In this course students will continue the exploration of graphic design with an emphasis on the principles of design. Students will learn about the history of typography as well as some of the historical movements in the field of graphics. The main emphasis of this course will be the exploration of problems and possible solutions that integrate the use of dynamic composition; combining images and typography (layering), photography and space (transparency) as effective ways to solve visual problems. Topics of study (which are subject to change) include fundamentals of design (line, shape, value, texture, color, form), graphic design - the new basics (figure/ground, framing, hierarchy, layers, transparency) as well as typography combined with imagery to create a visual story in a narrative form. Counts as an Arts credit. *Prerequisite: Graphic Design I or instructor's permission. 1 credit (offered Winter Term)*

**Computer Programming: Introduction to Coding:** This course offers an introduction to computer science covering the foundations of computer science and basic programming, with an emphasis on developing logical thinking and problem-solving skills. Each unit of the course is broken down into

lessons. Lessons consist of video tutorials, short quizzes, example programs to explore, and written programming exercises. In this course, you will write and run JavaScript programs in the browser using the CodeHS editor. This course is designed for beginners and does not require any computer programming experience. The course is intended to be highly visual, dynamic, and interactive for new coders *2 credits, (offered each term)*

**Game Development:** In this course, you will learn the fundamentals of game development as you program your own exciting projects from scratch in C#. As you iterate with prototypes, tackle programming challenges, and develop your own personal project, you will gain the necessary skills to design and build games using the Unity game engine. No pre-requisites or prior knowledge is required, just bring your curiosity. *2 credits, (offered Fall term)*

**Robotics:** This course will teach students the foundations of building and programming autonomous robots. The course is designed to get students thinking about the patterns and structure of not just robotics, but also programming and problem-solving more generally. LEGO MINDSTORMS EV3 will be used to provide a structured sequence of programming activities in real-world project-based contexts. No prerequisites or prior knowledge required. *2 credits, (offered Winter term)*

**Cybersecurity:** This course provides a foundation in information systems, networking, and cybersecurity. Students have opportunities to apply employability skills and to research careers in the information technology area. They also complete hands-on activities to build a strong foundation in computer hardware and connectivity. No prerequisites or prior knowledge required. *2 credits, (offered Spring term)*

## ***English for Academic Purpose (EAP)***

English for Academic Purposes is a suite of course offerings designed to bolster international student skills where and when they are needed. Comprised of two components, Skills Modules and Content Modules, this program envisions a Year One in which students strengthen their reading, writing and communication skill set, with Year Two reserved for a pivot to a more content-focused curriculum that further builds and enhances skills for academic success.

**Communication for School and Business:** This course offers students the chance to practice written and spoken English in a variety of different settings. Building upon skills like proper pronunciation and oral interpretation, the course will center around various forms of private and public speaking. This could include students working either with existing content, or content they generate themselves. Through a process of practice and feedback, the hope is that students will be prepared to comfortably use effective English both in and out of the classroom. *6 credits*

**Literature Seminar:** This is a thematic approach to literature focusing on a variety of genres. Each selection highlights a particular literary element or reading skill to learn and apply. A list of vocabulary words is assigned from each story and discussed in context. Discussion of the selection then follows in which students must hone their critical thinking and analytical skills. In addition, a novel will be assigned each trimester for independent reading followed by a project, which focuses on writing and knowledge of grammar, usage, mechanics, and editing skills. This course will provide the basics for mainstream English courses. *6 credits*

**Humanities Exploration - Economics and Government:** A EAP “Year 2” offering, this course takes a “deep dive” into several related disciplines adjacent to the humanities. “Economics and Government” begins with an examination of resources, and how management of those resources shapes the human experience past and present. The course then pivots specifically into the realm of business and macro-economics. The final trimester involves a survey of historical forms of leadership, law, and governance. In order to best appreciate the nuances of these topics, the course will emphasize “hands-on” projects in addition to more traditional academic work. *6 credits*

## STUDENT SUPPORT AND WELLNESS

As students progress through their academic journey at Solebury School, they will need different support at different times. For some this might be a formalized program such as the ones listed below (see Learning Support Programs). For others, it could mean creating a specific support plan when a student hits an academic roadblock, or helping a student get back on track after an absence. The role of the Director of Student Support and Wellness is to help guide all students to get the support they need to put their best academic foot forward. Additionally, the Director oversees accommodations plans for students who require specific interventions and considerations in the classroom or on assessments.

If you have any questions about Solebury School's student support, please contact the Director of Student Support and Wellness, Kristy Raska.

E-mail: [kaska@solebury.org](mailto:kaska@solebury.org) Call: (215) 862-5261 (ext 151)

## LEARNING SUPPORT PROGRAMS

For decades, Solebury School has recognized that not all college-bound students learn the same way. Our Learning Support Program was founded in the 1980s, a progressive endeavor for its time, and it continues to offer transformative experiences for students today. The program helps students achieve their potential through understanding their strengths, overcoming weaknesses, and teaching them to advocate for themselves. Throughout the years, students in our Learning Support programs have been honor students, outstanding artists, star athletes, and student leaders at Solebury School.

Academic success follows when we meet students on their level, and they feel safe, supported, and respected, and from there, we can foster growth and encourage students to push their own boundaries. At Solebury, we recognize that bright, capable students come with a variety of learning profiles; therefore, we offer a variety of Learning Support programs aimed to serve all students on our campus.

If you have any questions about Solebury School's Learning Support Programs, please contact the Director of Learning Support, Kimberly Rubenstein.

E-mail: [krubenstein@solebury.org](mailto:krubenstein@solebury.org) Call: (215) 862-5261 (ext 145)

### **Bridge and Bridge Plus**

The Bridge and Bridge Plus programs help students whose success is hindered by ADHD, executive functioning challenges, or difficulty expressing ideas in writing. Students take a full schedule of classes and meet with a Learning Specialist in small groups of up to three to help them stay on track, complete assignments, and develop strategies to achieve the success their intelligence merits. This program can serve as a "bridge" as students transition out of the English Foundations program. For some students, it is a bridge from a different academic environment to Solebury's rigorous, college-preparatory program. For others, it connects a past of good intentions but missed assignments and incomplete work to a brighter future of confidence, competence, and pride in a job well done. To meet students' needs, we offer several levels of Bridge support: Bridge Plus, which meets nearly every day; Bridge, which meets every other day, and we also offer a trimester-by-trimester Bridge support plan for students who feel they may not need a full year of Bridge support. Space is limited and there are additional fees for these programs.

### **Boost**

At Solebury, we strive to support all of our learners. While many students benefit from the formal Learning Support programs, others need less intensive and/or less frequent support. For these students, we offer Boost. During conference periods (when all Solebury students are free), the Learning Support

faculty is available for drop-in help, to provide guidance with study strategies, test-taking skills, time management, organization, prioritization, etc. Students can come as needed, or drop in regularly. There is no fee for this support, and all students are welcome!

### **Foundations English**

Our 9th - 11th grade level Foundations English classes are designed for students who struggle with language-based learning tasks. The classes are taught in a small group setting and are specifically designed to meet grade-level English curricular goals while addressing each student's individual learning needs.

\*See the English section for additional information about our Foundations English offerings.

\*Students who need additional support surrounding executive functioning may opt to apply for both Foundations English and Bridge.

### **Math Support Program**

The Math Support Program (MSP) is a learning enrichment and support program which provides innovative resources and a nurturing environment to support the math curriculum at Solebury School.

\*See the mathematics section for additional information about our Math Support Program offerings.

\*Students who need additional support surrounding executive functioning may opt to apply for both Math Support and Bridge.

## GLOBAL EDUCATION CONCENTRATION

Rising 9th and 10th grade students may choose to declare a focus in global education. This concentration aims to cultivate globally-minded young adults by providing a path for them to deeply engage in and reflect upon global academic courses, cultural events, service learning, travel immersion experiences, and an independent study. Students will meet with the Director of Global Education weekly during Open Advisory period. If you have any questions about Solebury School's Global Education Concentration, please contact our Global Education Director, Lucienne Knight.

### Academics

A course will be designated as an option for the Global Education Concentration if the curriculum requires students to critically examine various cultures and global issues through texts, films, discussions, assignments, and projects. *Specific courses will be outlined on course selection sheets with a "(G)".* For 2023-24, these courses are shown on page 5 of this Course Catalog.

- 24 credits total; 12 credits in non-World Language coursework
- enrolled in at least one Global Education course each year (full-year or trimester elective)
- enrolled in an EAP or World Language course each year
- have a combined total of 12 credits in junior and senior year

### Cultural Events

*examples: film, museum, speaker, performance, workshop, summer program, festival*

- attend a minimum of 4 Solebury School sponsored cultural events per academic year; written reflection submitted to the Global Education Director
- attend a minimum of 6 non-Solebury School sponsored cultural events per academic year; written reflection submitted to the Global Education Director
- assist in organizing one on-campus cultural event; written reflection submitted to the Global Education Director

### Service Learning

- 16 hours of community engagement with a cultural/global focus each academic year (in addition to Solebury School requirement)
- may be completed as part of a travel immersion experience if approved by the Global Education Committee

### Travel Immersion Experience

- minimum of five days spent in a non-native language area, planned through Solebury School or ones' own (approved by the global education committee)
- focus of the trip consists of more than strictly sightseeing
- detailed itinerary and written reflection submitted to the Global Education Director
- presentation to the student body and/or Global Education Committee

### Independent Study

- independent study and/or project completed in junior or senior year; approved by the Global Education Committee (can be completed during senior project)
- study/project concludes in a presentation and/or paper

## Notes about classes for the 2023-24 school year

Several classes will run at night. The specific days of the week and times in the evening have not been determined. They typically meet one night per week:

- 1) Multivariable Calculus (yearlong)
- 2) Life Drawing (term)
- 3) Photography I or II (term)
- 4) STC: Conservatory (yearlong)
- 5) We are offering a series of 1-credit English electives in the evening that will be open to our students and the general public. Since they're only one credit, taking this class does not suffice to fulfill our English requirement for each term. The classes are: The Art of Fiction (fall), The Art of the Personal Essay (winter), and The Art of the Novel (spring)

Here is a list of yearlong electives:

- 1) All AP courses
- 2) French/Spanish Conversation & Culture
- 3) Statistics, Multivariable Calculus
- 4) Honors Human Anatomy, Physics 2: Electricity and Magnetism
- 5) Honors Psychology
- 6) All advanced Art classes (denoted with a "Y" on the course selection form)

A few electives are offered across two terms:

- 1) Jazz Roots Honors, winter and spring
- 2) Rock Band, winter and spring
- 3) Solsingers, winter and spring
- 4) Ear Training and Music Theory, fall and winter

Several courses are cross-listed in multiple departments:

- 1) African American Experience from Reconstruction to WWII (Social Studies/English), fall term
- 2) Modern Dystopias (Art and Social Studies and English), fall term
- 3) Diversity & Culture Share (Art and English), winter term
- 4) Interrogating Privilege and Power in Media (Social Studies and English), winter term
- 5) Debating the Civil Rights Movement Through Film (Social Studies/English), winter term
- 6) Social Inequalities of the 21st Century (Social Studies and English), spring term

A few classes may be taken repeatedly:

- 1) Engineering II
- 2) Intro, Intermediate, or Advanced level art classes
- 3) Computer Programming

Miscellaneous:

- 1) Health will run in an Arts block in the winter term
- 2) Most art classes are only one credit. Exceptions include Art History, Diversity and Culture Share, and Engineering I which confer two credits.